The mediation skill in the English classroom at secondary school: a comparative study on the performance of bilingual section and bilingual program students

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# MÁSTER EN FORMACIÓN DE PROFESORADO DE EDUCACIÓN SECUNDARIA OBLIGATORIA Y BACHILLERATO

The mediation skill in the English classroom at secondary school: a comparative study on the performance of bilingual section and bilingual program students

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#### **ABSTRACT**

Mediation is a language skill that has not been given the attention that it deserves. However, no sooner had the new Spanish educational law, LOMLOE, integrated it in the English curriculum than teachers and experts on this field have become interested in it. Thence, this research paper is intended to account for the performance of secondary school students in regard to the mediation skill. More specifically, this study will focus on the Comunidad de Madrid bilingual project so as to analyse the differences, if any, between bilingual section students (BSS) and bilingual program students (BPS). To do so, this investigation draws on the Common European Framework of References for Languages (2001a), the CEFR-Companion Volume (2018), Appraisal Theory (Martin & White, 2005), and Reading to Learn pedagogy (Whittaker, 2018) to compare pupils' performances and discover if they need any sort of guidance by the teacher by using Reading to Learn (R2L) pedagogy or, conversely, they can cope with it by themselves. Likewise, this paper also constitutes an innovative investigation as it adapts the methodology of R2L so as to work with the mediation skill in the English classroom. Hence, results have demonstrated that when learners are left alone, bilingual section students outperform better than bilingual program pupils. Nevertheless, if the teacher guides learners through R2L, bilingual program students improve in a higher way their results with respect to those in bilingual section.

**Keywords**: mediation, *Reading to Learn* pedagogy, Appraisal Theory, genre, bilingual section students and bilingual program students.

La mediación es una destreza de la lengua a la que no se le ha dado la atención que se merece. Sin embargo, los profesores y expertos en esta materia se han interesado en ella tan pronto como la nueva ley educativa española, LOMLOE, la ha integrado dentro del currículo de inglés. Por consiguiente, esta investigación está destinada a considerar el desempeño de los aprendientes de secundaria con respecto a la habilidad de mediación. Más específicamente, este estudio se centra en el proyecto bilingüe de la Comunidad de Madrid para analizar las diferencias, si las hay, entre los estudiantes de sección bilingüe (BSS) y aquellos de programa bilingüe (BPS). Para ello, esta investigación hará uso del Marco Común Europeo de Referencia para las Lenguas (2001a), el MCER-Volumen Complementario (2018), la Teoría de evaluación (Martín & White, 2005), y la pedagogía Leer para Aprender (R2L) con el fin de comparar el desempeño de los estudiantes y comprobar si necesitan algún tipo de guía por parte del profesor usando la metodología de Leer para Aprender, o, por el contrario, pueden desenvolverse por sí solos. Igualmente, este trabajo constituye un estudio innovador puesto que adapta la pedagogía R2L para trabajar la destreza de la mediación dentro de aula de inglés. Por tanto, los resultados han demostrado que, si a los estudiantes se les deja solos, el estudiantado de sección bilingüe consigue mejores resultados que los educandos del programa bilingüe. Sin embargo, guiando a los aprendientes a través de R2L, los estudiantes de programa bilingüe mejoran en mayor medida sus resultados con respecto a aquellos en sección bilingüe.

**Palabras clave:** mediación, pedagogía *Leer para Aprender*, Teoría de la evaluación, género, estudiantes de sección bilingüe y estudiantes de programa bilingüe.

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# 1. RATIONALE

After the publication of the *Real Decreto 217/2022*, de 29 de marzo, por el que se establece la ordenación y las enseñanzas mínimas de la Educación Secundaria Obligatoria as well as the *Real Decreto 243/2022*, de 5 de abril, por el que se establecen la ordenación y las enseñanzas mínimas del Bachillerato, professional language teachers of secondary education have discovered that the English curriculum has been slightly modified. The new educational law (LOMLOE) has introduced, apart from the four traditional skills (reading, writing, listening, and speaking), another skill known as mediation. While the former have been deeply explored in the literature of language teaching and education, the latter has not been widely studied for the present.

Having said that, the current research paper aims at analysing the incorporation of this new language skill within the foreign language classroom at secondary school, which will be applied in 1° ESO, 3° ESO, and 1° Bachilletaro from September 2022, as high schools will resume their activities. In that sense, the study itself is oriented towards providing a first approach to students' performance in this new ability so that secondary school teachers in the school under analysis are able to have an overview of what they will expect in their classes in regard to mediation as well as to the type of language employed in it, whether it is more interpretative or evaluative, or even both.

Regarding the school context, this paper will focus on the program implemented in the Comunidad Autónoma de Madrid (CAM), which dates backs to 2004. Although it only involved 26 primary schools at the beginning, its growth has been exponential (Llinares & Evnistkaya, 2021). Indeed, in the school year 2021-2022, the numbers increased to 402 primary schools and 196 secondary schools (Comunidad de Madrid, 2022). As a result, this research becomes more relevant given the presence of the bilingual programme and the differences between bilingual section and bilingual program.

Overall, the motivation for this study is to investigate the application of this new skill which has already stirred up a heated debate in language departments from the mere moment in which the law was enacted. Consequently, this in-depth investigation will surely help secondary school teachers to understand better students' needs and strengths in regards *mediation*, the role of specific pedagogies, such as *Reading to Learn*, and above all, to account for the differences that might be found between bilingual section groups and bilingual program ones, within the CAM bilingual programme.

# 2. THEORETICAL FRAMEWORK

In order to lay down the foundations of the present research paper, this section will be completely devoted to providing the reader with the main theoretical underpinnings. In that sense, *mediation*, the fifth skill in language teaching, will constitute the point of departure of this part. It will be followed by a thorough description of Appraisal Theory framed within systemic functional linguistics (SFL) to account for evaluative language; and above all, *Reading to Learn* pedagogy, a methodology that will play a pivotal role in the present study and demands great attention.

#### 2.1. The fifth skill: mediation

Considered as the backbone of modern language teaching, the *Common European Framework of Reference for Languages* (CEFR) came into being in an effort to unite and regulate educational language policies as regards the learning and the teaching of a language. In fact, it was not until the end of World War II and the subsequent economic blooming of Europe that the Council of Europe took the first step towards developing a reference document that specified language education (Coste & Cavalli, 2015:5) within the frame of the European continent to which more and more countries have gradually adhered.

As properly defined in the CEFR, the *Common European Framework of Reference for Languages* "provides a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, textbooks, etc. across Europe" (Council of Europe, 2001a:1). Likewise, it tries to enhance educational cooperation between countries; to enrich and value the different languages found in Europe; and to ease the communication and interaction between European countries with different mother tongues (Council of Europe, 2018:25). Therefore, under these premises, the CEFR puts forwards an action-oriented approach towards language, in which users and learners of a language are conceived as "social agents', i.e., members of society who have tasks (not exclusively language-related) to accomplish in a given set of circumstances, in a specific environment and within a particular field of action" (Council of Europe, 2001a:9).

On this basis, the CERF constitutes a breakthrough in language teaching as it substituted the traditional "four skills" model terminology (Lado, 1961, in North & Piccardo, 2016:5) which was proven to be "inadequate to capture the complex reality of

communication" (Council of Europe, 2018:30). In that sense, the CEFR became a pioneer not simply for reconceptualising "language use around varied modes of communication and types of activity [reception, production, interaction, and mediation]" (Cores, 2022:17), but also for recognizing the importance of language in its social dimension. It thus emphasises that the co-construction of meaning is in a "constant link between the social and individual dimensions in language use and language learning" (North & Piccardo, 2016:5).

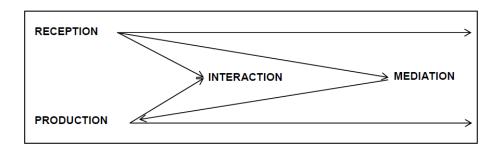
Nevertheless, though the notion of *mediation* as the fourth type of activity, also labelled as fifth skill, was first presented in 2001, it was largely downplayed in the literature. Indeed, the CEFR (2001a) did not broaden the notion to its full potentiality (North & Piccardo, 2016:5) to such an extent that the reader can actually find scanty references to this skill in the *CEFR* (2001a:14):

"In both the receptive and productive modes, the written and/or oral activities of mediation make communication possible between persons who are unable, for whatever reason, to communicate with each other directly. Translation or interpretation, a para phrase, summary, or record, provides for a third party a (re)formulation of a source text to which this third party does not have direct access. Mediation language activities, (re)processing an existing text, occupy an important place in the normal linguistic functioning of our societies".

Apart from a brief definition of what *mediation* is, as shown above, the CEFR (2001a:14) also provided a limited insight towards two main activities involved in *mediation*: interpretation and translation (see pages 87-88 from the CEFR (2001a)). Nonetheless, the CEFR did not furnish any further information about *mediation* with "little development and no illustrative descriptors provided" (North & Piccardo, 2016:7). Additionally, although there were several practical specifications and descriptions in the preliminary drafts presented in 1996 and 1998, they were finally "omitted from the published version of the CEFR and mediation was reduced to its professional scope in the field of cross-linguistic translation and interpretation" (Valero- Garcés, 2005, in Cores, 2020:19).

Albeit the scarce interest of the fourth mode of activity in CEFR (2001a), the publication of the *CERF-Companion Volume* (2018) tried to solve the shortcomings of *mediation*. So, with that objective in mind, the *Companion Volume* (2018:32) argues that

mediation was largely understated as a consequence of space limitations of the CEFR (2001a). Thus, it was in this *Companion Volume* (2018:32) that "the 2014-2017 project to develop descriptors for mediation was set up". No sooner had the *CEFR-Companion Volume* been released than a diagram appeared that showed the relationship of the three modes of activity (reception, production, and interaction) with the newly mode of activity, *mediation*. See Figure 1 extracted from Council of Europe (2018:32) that perfectly depicts the interrelation between them.



**Figure 1.** The relationship between reception, production, interaction, and mediation.

As the reader can notice, *mediation* is found in between the *reception* (reading and listening) and *production* (speaking and listening) mode of activities as it "makes communication possible between persons who are unable, for whatever reason to communicate with each other directly" (North & Piccardo, 2016:5). What is more, the *CEFR-Companion Volume* (2018:103) provides a more detailed definition of the notion of *mediation* as follows:

"In mediation, the user/learner acts as a social agent who creates bridges and helps to construct or convey meaning, sometimes within the same language, sometimes from one language to another (cross-linguistic mediation). The focus is on the role of language in processes like creating the space and conditions for communicating and/or learning, collaborating to construct new meaning, encouraging others to construct or understand new meaning, and passing on new information in an appropriate form. The context can be social, pedagogic, cultural, linguistic or professional."

Taking into account the aforementioned specification, it is clear that the CEFR has widened the scope of *mediation*. Not only does it boost intercultural and plurilingual communicative exchanges, but also the participants in the mediation transaction act as intermediaries whose function is "to create the appropriate space and conditions that

allow communication or learning, where language users may collaborate with their interlocutors to build meaning together" (De Arriba García & Cantero Serena, 2004 in Cores, 2020:20).

In the path towards a deeper understanding of this fifth skill, the *CEFR-Companion Volume* (2018) explicitly mentions two main axes around which *mediation* revolves: *mediation activities* and *mediation strategies*. While the former make reference to assorted aspects of *mediation* and its shared features, the latter describe the strategies employed to explain concepts and texts in relation to "conventions, conditions and constraints of the communicative context" (Council of Europe, 2018:126). See Figure 2 below that comprises the spectrum of mediation activities as presented in the *CEFR Companion Volume* (2018).

#### Mediating a text

- ► Relaying specific information in speech and in writing
- ▶ Explaining data (e.g. in graphs, diagrams, charts etc.) in speech and in writing
- ► Processing text in speech and in writing
- ► Translating a written text in speech and in writing
- ► Note-taking (lectures, seminars, meetings, etc.)
- ► Expressing a personal response to creative texts (including literature)
- ► Analysis and criticism of creative texts (including literature)

#### Mediating concepts

- ► Collaborating in a group
  - ► Facilitating collaborative interaction with peers
  - ► Collaborating to construct meaning
- ► Leading group work
  - Managing interaction
  - ► Encouraging conceptual talk

#### Mediating communication

- ► Facilitating pluricultural space
- ▶ Acting as intermediary in informal situations (with friends and colleagues)
- ▶ Facilitating communication in delicate situations and disagreements

Figure 2. Spectrum of mediation activities.

However, regardless of the different *mediation activities*, the participants, taking part in the process of *mediation*, need to "have a well-developed emotional intelligence, or an openness to develop it" given that they have to pay special attention to the "needs, ideas, or expression [...] of the party or parties for whom one is mediating" (*CEFR-Companion Volume*, 2018:106). Consequently, scholars, such as North B. and Piccardo E. (2016), established four types of mediations taking into account the different insights given to this mode of activity in the CEFR. They made a distinction between (a) *linguistic mediation*, (b) *cultural mediation*, (c) *social mediation*, and (d) *pedagogic mediation*. While *linguistic mediation* implies "knowing how to translate and interpret, more

formally or less formally, or transforming one kind of text into another" (North & Piccardo, 2016:9), *cultural mediation* is inherently done as we are considering the culture of the participants involved (North & Piccardo, 2016:9). Similarly, *social mediation* is interpreted as "the provision of ombudsman, counselling and conflict prevention or resolution services" (North & Piccardo (2016:10), and last but not least, *pedagogic mediation* entails the mediation of knowledge by teachers and parents to foster "the ability to think critically for oneself" (North & Piccardo, 2016:11).

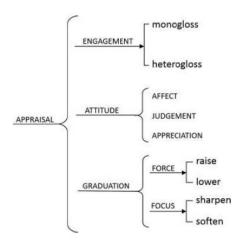
In a similar vein to the categories proposed above, it is important to mention that the *mediation* skill can be carried out on a twofold manner according to the communication channel. On the one hand, if it is an oral production in which participants have to mediate while speaking, then we are in front of an *oral mediation*. Conversely, provided that the participants have to write a piece of writing, the *mediation* will be called *written mediation*. Hence, this constitutes a fundamental distinction given that the present research paper focuses on the written one.

In a nutshell, the *Common European Framework of Reference for Languages* (CEFR) can be taken as the Bible of language teaching and learning. Not only does it explain the common reference levels, but it also collects the four modes of activities (reception, production, interaction, and mediation) upon which the English curriculum is based. Indeed, the departure from the traditional fourth skills, as presented by Lado (1961, in North & Piccardo, 2016:5) has made possible that *mediation* emerges as a unique skill that deserves research and investigation. Although it took almost two decades until a full description of the four modes of activity was provided, as soon as it become codified and regulated in the *CEFR-Companion Volume* (2018), it has come in handy for the design of language curricula and syllabuses across European countries. In that sense, the role of *mediation* as an everyday life communication activity and as part of European curricula has strongly suggested the importance of language interaction within a globalised context where plurilingualism and multiculturalism must be always present.

## 2.2. Appraisal theory

As part of Systemic Functional Linguistics (SFL), Appraisal Theory constitutes an essential framework proposed by Martin & White (2005) in order to analyse the language of evaluation. Indeed, Appraisal model tries to systematise the array of

resources used by speakers/writers to negotiate evaluation (Thompson, 2014) and to identify the different "lexico-grammatical resources used to convey these types of interpersonal meanings which are particularly relevant in the language of schooling" (Llinares & Evnitskaya, 2021:370). There are three main domains that can be identified within this field: *attitude*, *engagement*, and *graduation*, as presented in Figure 3.



**Figure 3**. An outline of the system of appraisal (from Martin & White, 2005, in Thompson, Bowcher, Fontaine, & Schönthal, 2019).

On the one hand, *attitude* indicates "whether the speaker thinks that something (a person, thing, action, event, situation, idea, etc.) is good or bad" (Thompson, 2014:80). Consequently, expressing attitudinal meaning can be done by any of the following semantic domains, namely *affect*, *judgment* and *appreciation*. First of all, as stated by Thompson (2014:80), *affect* refers to the "way of talking about how we feel about things: it covers the expression of our emotional responses". It is normally realised with verbs of emotions, adverbs, adjectives, and nominalisations, such as '*We adore pragmatics*' or '*The country was horrified with the attack*'. Secondly, the term *judgment* makes reference to the "domain of meanings by which attitudes are constructed with respect to human behaviour" (White, 2011:22) such as '*criticise*', '*praise*', '*condemn*' or '*applaud*'. Finally, *appreciation* focuses on the evaluation of "artifacts, buildings, texts and works of art, and also of natural phenomena and states of affairs [...] by which such objects are assigned a value (negative or positive) in a given discourse or field of activity" (White, 2011:25), e.g., 'a second-class holiday', 'a flawed referendum', etc.

The second main type of Appraisal is *engagement*. By analysing *engagement*, it allows us to observe the "means by which speakers/writers adjust and negotiate the arguability of their propositions and proposals" (The Appraisal Website, 2022).

Therefore, the grammatical resources that should be taken into account for this area of work include reporting verbs (e.g., *some people commented that...*), markers of attribution (e.g., *The president says that...*) and modal verbs (e.g., *might, must, should, etc.*). Precisely, the latter can be further classified according to whether they are epistemic or deontic. While the former express possibility or probability, the latter show permission or obligation (Halliday & Matthiessen, 2014).

Finally, the system of graduation has a direct effect on the message, making it more or less intense (The Appraisal Website, 2022). As described by Thompson (2014:80), graduation deals "with the ways in which speakers and writers can intensify or weaken their evaluations". It includes force and focus. While the former amplifies the meanings of words, like 'very', 'extremely', and 'really' (e.g., 'very confused', 'extremely robust', etc.), the latter is "about the resources for making something that is inherently non-gradable gradable" (Martin & Rose, 2003:46) such as 'huge problems' or 'a few problems'.

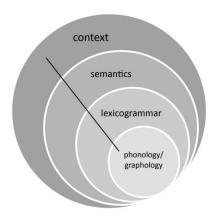
To sum up, the reader must be aware that only the main categories (*attitude*, *engagement*, and *graduation*) will be applied in this study so as to analyse the employment of interpretative and evaluative language in students' written mediations. Indeed, Appraisal Theory will eventually allow us to determine the extent of evaluative resources used by students when transmitting a given information to another participant.

#### 2.3 *Reading to Learn* pedagogy

On many occasions reading and writing could become a demanding toil both in a foreign language and in our mother tongue. Indeed, as pointed out by Gee (2004, in Whittaker & Acevedo, 2016), research has demonstrated that a great amount of secondary school failure derives from reading problems that appear at the end of the primary school years when students are unable to understand the meaning of complex subject texts. Therefore, to tackle this problem, *Reading to Learn* (also known as R2L; & *Leer para aprender* -in Spanish-) arises as a pedagogy for teaching in education which integrates both language and context whilst focusing on reading and writing texts, as "texts are exemplars of particular genres" (Becerra, Herazo, García, Sagre & Díaz, 2020:237). This is the reason why R2L is considered to be a genre-based teaching method. In that sense, although it was firstly developed in Australia to be applied to Aboriginal pupils which

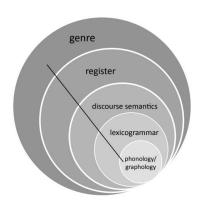
were on the margins of a literate society (Whittaker, 2018), it was rapidly spread across and extraposed to other educational contexts and stages.

Reading to Learn thus emerges as a pedagogy whose foundations are grounded on the functional linguistic model of language. That is to say, this linguistic model intends to understand how language takes its meaning in context, so that its potentiality can be explained on the basis of the assorted contexts and users in which language is employed (Whittaker & Acevedo, 2016). Indeed, Halliday and Matthiessen (2014), as chief representatives of this model, set out to describe language as organised in a fourfold level circle (see Figure 4) "with phonology realizing lexicogrammar, lexicogrammar realizing semantics, and semantics realizing context" (Rose & Martin, 2013:1) where each of the "elements at each stratum serve functions in the context of higher strata, with the social contexts of language modelled as a further stratum of meaning" (Rose, 2015:1).



**Figure 4.** Halliday's perspective of context as a stratum of meaning, extracted from Halliday (2013, in Rose & Martin, 2013:2).

Martin (1985, in Rose & Martin, 2013) made a further distinction within the *context stratum* as being composed of two more levels, *register* and *genre* (see Figure 5). Hence, this model allowed Martin not only to map contexts as part of genre, but also to explain that register and genre are developed as an inherent part of the meaning relations established in a text that extends beyond the clause, thus taking the text as the basic unit of analysis in contextual linguistics rather than the clause (Rose & Martin, 2013).



**Figure 5.** *Martin's supervenient model of language and social context, extracted from Martin* (1985, in Rose & Martin, 2013).

Having said that, it was not until educators and linguists worked collaboratively that they described the typical genres written in primary and secondary school contexts according to their social goal. As argued in Whittaker and Acevedo (2016), whatsoever the function of the text-type, they all innately express the reason why it was developed within a community, either for "engaging readers, informing them or evaluating texts or points of views" (Rose & Martin, 2013:3). Thus, the reader can observe a general overview of secondary school genres<sup>1</sup> in Table 1 as extracted from Rose & Acevedo (2017).

Table 1. General overview of secondary school genres, extracted from Rose & Acevedo (2017).

GOAL		GENRE
Engaging	Stories	Recount, narrative, exemplum, and anecdote.
	Histories	Autobiographical recount, biographical recount, historical recount, and historical account.
Informing	Explanations	Sequential explanation, conditional explanation, factorial explanation, and consequential explanation.
	Procedures	Procedure, protocol, and procedural recount.
Rep	Reports	Descriptive report, classifying report, and compositional report
Evaluating	Arguments	Exposition, and discussion.
Diamanng	Text responses	Review, interpretation, and critical response

<sup>&</sup>lt;sup>1</sup> In case the reader is interested in this matter, a more detailed classification of secondary school genre can be found in Whittaker's *Developing academic literacy in CLIL/bilingual classes: uncovering meanings, building knowledge* (2022). Master de Lingüística Inglesa, UCM, slightly adapted from Rose and Martin

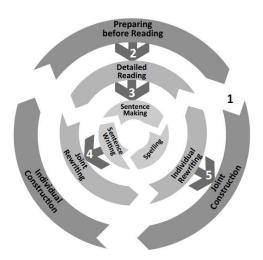
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(2012).

As shown above, genres are classified depending on the purpose and function of the text. Genres are further divided into stages (e.g., for a *narrative*: *orientation*, *complication*, and *resolution*) which are required to reach the text's aim. Each of the different stages constituting the text is characterised by a series of linguistic elements at "the level of lexico-grammar" (Whittaker & Acevedo, 2016:40). Additionally, even stages themselves are made up of certain phases (e.g., for the stage of *orientation* within the *narrative* genre, we can find: *setting*, *description*, and *episode*, among others). In that sense, as properly argued by Shiu-kee Shum, Pui Tai, & Dan Shi (2018:238), thanks to the multiple stages and phases in which it is organised, *Reading to Learn* allows teachers to "offer more scaffolding to the students with low writing achievement" and, thus, having more chances to thrive in the process of reading and writing.

Heretofore, the reader has become acquainted with the predominant principles underlying this model of language teaching. Consequently, it is time to focus on how to implement R2L methodology within the secondary school classroom. As stated before, R2L takes texts as point of departure from which the teacher will guide and monitor students in the process of reading and understanding the text (Whittaker, 2018). Therefore, as observed in Figure 6, *Reading to Learn* follows "a cycle of three levels of increasing support to scaffold learners to read and write various kind of texts independently" (Becerra et al., 2020:237).



**Figure 6.** Sequencing options for R2L pedagogy (extracted from Rose & Martin, 2013:7).

The first level of the cycle (outer circle in Figure 6) is intended to "assist students in text comprehension and guide them to apply their understanding of these reading texts

into teacher-guided writing and student-independent writing" (Shiu-kee Shum et al., 2018:238). To do so, this level starts by preparing pupils for reading where the teacher activates the background knowledge of students and provides them with "a summary in everyday spoken language, before reading aloud the sentence they are working on" (Whittaker & Acevedo, 2016:41); then it is followed by a joint construction in which pupils and the teacher will successfully write a text of the same genre after "jointly deconstructing the stages and phases of model texts in target genres" (Rose & Martin, 2013:6). Afterwards, there is independent construction in which learners actually write a new piece of writing "of the same genre either in groups or on their own, depending on the level of support that is required with little or no teacher support" (Becerra et al., 2020:238).

At the second level (middle circle in Figure 6), learners are provided with the necessary support to understand and comprehend the schematics structure and lexicogrammatical characteristics of the text (Shiu-kee Shum, et al., 2018). To reach that goal, the teacher monitors pupils by reading in a thorough manner the passages of the text ("sentence-by-sentence reading" as explained by Becerra et al., 2020:238), and prepare them "to recognise groups of words in each sentence and elaborating on their meanings as students identify each word group" (Rose & Martin, 2013:6). Moving on, this level "involves students firstly in writing the highlighted words or phrases from detailed reading as notes on the board" (Becerra et al., 2020:238). Finally, pupils will rewrite individually the text using the notes from the blackboard.

The third level of precision (inner circle in Figure 6) is generally thought for those weak students who still struggle to understand the text. In that sense, as stated by Rose & Martin (2013:7), "teachers will guide students to manually manipulate wordings [...] and rearranging them" with the aim of helping pupils to gain control of sentence formation and patterns. This last level, then, pretends to provide a meticulous analysis, including sentence making, spelling issues, and sentence rewriting.

As presented in *Genre, knowledge, and pedagogy* by Rose (2015), see Figure 7 which links the different steps in the R2L pedagogy with its functions and the language focus in each of the levels.

			curriculum genres	functions	language focus
	Preparing for Reading			Understanding texts as they are read	Patterns of field unfolding through genre
			Detailed Reading	,,	
whole text	passage	sentence	SentenceMaking Spelling SentenceWriting	Embedding foundation literacy skills in reading and writing curriculum texts	Functions of word groups in sentences, words in groups, letter patterns in words
			Joint Rewriting	Appropriating literary, abstract and technical language from reading	Grammatical structures as sentences are rewritten
			Joint Construction	Constructing successful texts for assessment	Stages and phases of genres explicitly labelled

**Figure 7.** *Sequence of R2L pedagogy with functions and language focus per level.* 

Accordingly, implementing *Reading to Learn* requires certain levels of scaffolding in reading and writing. In fact, as mentioned by Rose (2010, in Whittaker, 2018:21), "this intensive work on reading and writing leads to deep learning of the topic and the language which constructs it, which students then reuse to write about new topics of their choice or from the curriculum". That is why this can perfectly be used for the *mediation* skill as students must be aware of the language that they are using to convey the message. This will enable them to understand the text while writing another one for transmitting the information to another participant.

# 3. OBJECTIVES AND RESEARCH QUESTIONS

The purpose of this *Trabajo de Fin de Máster* is to study secondary students' performance in carrying out the *mediation* skill, established in the new curriculum of the educational law LOMLOE. Together with this, the research will make a distinction between pupils pertaining to bilingual section and bilingual program as stipulated in the bilingual project of the Comunidad Autónoma de Madrid (CAM). More specifically, not only will this paper explore the possible differences between these two groups, but it will also suggest ways in which secondary school teachers could put into practice the *mediation* skill in their lessons taking into consideration potential differences in competence levels across the two groups.

Given that bilingual section students have a higher level of exposure to the English language in stark contrast to those in bilingual program, it is hypothesised that they will cope better with this new skill without posing any kind of hurdle. The study will try to answer the following research questions:

RQ<sub>1</sub>: When working on the written mediation skill, are there any differences between bilingual section students, who have a high exposure to the English language, and bilingual program pupils, whose exposure is more reduced?

RQ<sub>2</sub>: Are there any effects of the implementation of the R2L pedagogy on bilingual section students' performance in the written mediation skill?

RQ<sub>3</sub>: Are there any effects of the implementation of the R2L pedagogy on bilingual program students' performance in the written mediation skill?

RQ<sub>4</sub>: Are there any differences in the effects of the application of the R2L pedagogy across bilingual section and program groups?

With the goal of responding to the aforementioned research questions, not only will CAF measurements be used to analyse students' productions, but also Appraisal Theory will allow the investigation to determine whether students comply with the genre. Notice that when working with persuasive genres, evaluative and interpretative language is essential. Accordingly, the subsequent sections will establish the methodology, results, and discussion in order to give an answer to these queries.

# 4. METHODOLOGY

# 4.1. Type or research: level of investigation and research design

This paper can be considered to be applied research given that it is grounded on real-world questions and applications (Banerjee & Chaudhury, 2010) as it tries to discover the performance of students' *mediation* skill and its variation or not after the implementation of the methodology of *Reading to Learn* (R2L). Thence, the aim of this research is to test the hypotheses as well as to generate practical scientific knowledge for future investigations in the educational field of language teaching. Therefore, taking this into account, this deductive investigation moves from some general premises to reach certain conclusions to prove whether or not the suppositions were valid.

Similarly, no research at all has been applied to measure the effect of R2L on *mediation* and the comparison of this skill across groups in the Madrid bilingual education programme, thus becoming an important breakthrough in this field of expertise. Likewise, the present paper will mainly rely on quantitative data, using both statistical and computer-based tools (precisely, Excel) to measure the gathered information. Though this will be our principal source of data collection, it must also be mentioned that on some occasions we will draw on qualitative data by using some exemplifications from the written mediations of students.

Hence, this can be also claimed to be primary research with respect to the source of information because the data is first-handed information, namely taken from the high school I.E.S Isaac Albéniz (Leganés). This makes also possible to regard this paper as field research since the study has collected the data from the same location where we have observed the phenomenon. Together with this, all the variables, that will be measured in this investigation, have been under controlled conditions with the goal of identifying and ascertaining the effects of an independent variable. That is why this paper is said to be experimental as the different phenomena taking place in this investigation will be assessed through study and control groups.

Additionally, this research can be considered to be an example of action research given that the teacher implementing R2L is also the researcher of his own practice who wants to observe not only how mediations works, but also the effects of R2L on the fifth skill.

#### 4.2. Population and sample of the research paper

As properly defined by (Banerjee & Chaudhury, 2010), in statistical analysis, the term *population* refers to "an entire group about which some information is required to be ascertained". That is, the population of this paper would be all students that belong to the secondary education in Comunidad de Madrid. Indeed, I took advantage of the secondary school where I did my teaching practice so as to carry out the investigation. Therefore, we have restricted the present research paper to those pupils who were at the high school I.E.S Isaac Albéniz, more precisely those in fourth of ESO (Educación Secundaria Obligatoria).

### 4.2.1. Context setting: I.E.S. Isaac Albéniz

The I.E.S. Isaac Albéniz is a public secondary school located in Leganés, a southern city near Madrid. The high school has more than six hundred students, distributed in nearly 25 groups where around 7% of the pupils belong to Latin American countries as well as East European and North African, according to the information presented in the PGA (Programación General Anual). As a result, this has a direct impact on the interest and appreciation of different cultures, leading to multiculturalism and interculturality, two fundamental aspects in today's society which are also taken into consideration in the Plan de Atención a la Diversidad of the high school.

This public secondary school is bilingual. Based on the current regulations governing bilingual schools in the Community of Madrid (CAM), the bilingual programme of Isaac Albéniz is organised in a twofold way: one the one hand, we have the bilingual section ('sección bilingüe') in which students are intended to acquire a B2 level at the end of 4° ESO; and the bilingual program ('programa bilingüe') where students have a lower level of English and their goal is to reach a B1 at the end of the secondary education. In that sense, the level of exposure to the English language in both groups varies. Bilingual section pupils are highly exposed given that they have 5 hours of English plus 12 hours of English teaching in content subjects, including Natural Science, Biology, Geography, History, Technology, Arts and Crafts, and Physical Education. In stark contrast, bilingual program students also have 5 hours of English as a subject, plus 6 hours of English teaching in content subjects such as Technology, Arts and Crafts, and Physical Education. In other words, while section pupils are exposed to 17 hours of

English per week (high-exposure), program students are exposed to 11 hours per week (low-exposure).

Therefore, this degree of contact with the English language fosters the development of two profiles of students which are organised in four groups at the I.E.S Isaac Albéniz: 4°A and 4°B in which we find bilingual section students; and 4°C and 4°D where we can actually come across bilingual program students. On the one hand, pupils pertaining to bilingual section have a good level of English, especially in written and oral comprehension. They tend to be interested in the subject and there are no discipline problems in a general way. However, these pupils pose new challenges for the department's teaching staff as these students feel that they have the sufficient level, thus disdaining on some occasions the subject and consequently not making such a progress as students in bilingual program do. On the other hand, pupils in bilingual program groups could be considered 'standard' students if it were not for the fact that they have an absolute diversity of levels as well as very varied behaviour and interests, becoming a difficult task in terms of methodology, creativity, and discipline. In that sense, this sort of students tends to work harder given that for them English is as demanding as any other subject.

#### 4.2.2. Participants in the study

Taking into consideration the previous characteristics of the context in which the investigation has been carried out, Table 2 below shows the distribution of the sample.

**Table 2.** *Participants in the study.* 

	anorm .	E A CHED	PARTICI	IPANTS		
	GROUP	Т	EACHER	PRE- MEDIATION	POST- MEDIATION	TOTAL
BILINGUAL	4°A	She	ila Martín	26 students	-	55 students
SECTION	4°B	Juan Guzmán		29 students	29 students	33 students
BILINGUAL	4°C	Sheila Martín		25 students	23 students	48 students
PROGRAM	4°D	María Pérez		23 students	-	46 students
<u> </u>	_		TOTAL	103 students	52 students	

As depicted in Table 2, out of the 114 4° ESO students in the high school, 103 students took part in this study (90,35%). Consequently, out of the 103 students partaking

the investigation, 55 students belonged to bilingual section (53,39%) while the remaining 46,61% (48 students) pertained to bilingual program.

As indicated above, one of the objectives of the present research paper was to measure the difference, if any, between a non-interventionist strategy in contrast to guiding students in the *mediation* skill. For this purpose, only 52 students (corresponding to 50,49%) have written two mediations (the pre-mediation<sup>2</sup> & the post-mediation<sup>3</sup>), while the remaining 49,51 % (50 students) have just written the *pre-mediation*. The decision was motivated by the fact that for this study it was useful to have both a control group and an experimental group in bilingual section and bilingual program. Therefore, we implemented two *Reading to Learn* sessions in 4°B and 4°C (experimental groups in section and program, respectively), while 4°A and 4°D functioned as control groups. As shown in Table 2 above, thus, the number of pupils who wrote the *pre-mediation* was 103, corresponding to 66,45% out of the total amount of written mediations, in contrast to 33,55% who only wrote the post-mediation by working with Reading to Learn. It should be mentioned that some of the students in 4°C<sup>4</sup> that participated in the premediation were not able to write the post-mediation since they had to sit a grammar and vocabulary exam the day of the R2L session. Therefore, for the correct development of this research, the paper has only considered students who did both the *pre-mediation* and post-mediation.

#### 4.3. Techniques & instruments of data collection

Up to now, the current research paper has provided the main lines of the investigation as well as it has detailed the population and sample that have been employed. Hence, it is the exact moment to furnish the reader with the techniques, instruments, and methodologies utilised to collect the data for this study.

<sup>&</sup>lt;sup>2</sup> The term labelled as *pre-mediation* makes reference to the written mediation that students have carried out without any kind of help or guidance of the teacher. In that sense, students were simply left alone to fulfil the task on the basis of their knowledge of English.

<sup>&</sup>lt;sup>3</sup> The notion labelled as *post-mediation* refers to the written mediation that pupils have done after working with the *Reading to Learn* pedagogy for a session in which the teacher has provided the necessary support for them to comply with the objective of mediation.

<sup>&</sup>lt;sup>4</sup> For the proper development of the research paper, although three students from 4°C wrote the premediation, they will not be taken into consideration for the computational analysis since they are outliers that cannot be used to contrast their *pre-mediation* and *post-mediation*.

#### 4.3.1. The sessions

Firstly, this project was carried out in two different sessions. The four groups of 4° ESO took part in the *pre-mediation* sessions. Students were intended to write an email to Max, an English friend, about an environmental association that he would like to join (see the instruction of the *written mediation* in Appendix 1). All the participants, in this first session, were given the same amount of time to write the mediation, exactly 35 minutes. In the *pre-mediation* stage, the teacher did not help students during the actual writing, he simply explained the instructions to the pupils. As a result, at the end of this session, 103 mediations were collected (see Appendix 2 to observe some of these written mediations).

Moving on, the second session was exclusively done with 4°B and 4°C (one of the section and one of the program groups) where R2L was implemented prior to a second mediation text written by the students. Each lesson lasted 50 minutes and thus, the allotted time for developing the methodology of R2L was around 30 minutes, while the last 20 minutes were assigned to writing again the same mediation. However, in both groups students were given five more extra minutes to revise their written mediations. Hence, the outcome of these two sessions<sup>5</sup> was 52 more mediations, out of which 29 mediations (55,76%) were written by bilingual section pupils and 23 (44,24%) written by bilingual program students. Thus, both the *pre-mediation* and *post-mediation* make a total of 155 mediations for the whole study.

#### 4.3.1. Implementing *Reading to Learn* pedagogy

To properly carry out the pedagogical intervention in the experimental groups, there have been two main methodologies that have been used: *Reading to Learn* pedagogy and flipped classroom. While the former has already been explained in depth in the Theoretical Framework of the present study, the latter was used so as not to lose so much time during the session as it will be mentioned later on.

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<sup>&</sup>lt;sup>5</sup> The reader should know that the two sessions on R2L were audio-recorded. However, given the limited space of the present research paper they will not be employed. Nevertheless, they will be kept so that this investigation could be further expanded in a future by checking the teacher's performances and its relation to student's development in the session, among many other lines of investigation that can be applied to that material.

Reading to Learn was chosen as the core methodology for developing the two sessions (one in a section group and another one in a program group) to work on *mediation*. Therefore, such is the importance of this matter for the present study that the reader can actually find a thorough discussion on the design and implementation of R2L in Section 5 of the present study.

Additionally, due to the scanty amount of time that we had to carry out the whole session of R2L, I decided to take advantage of flipped classroom, defined as "a methodology in which the more practical part of the class [...] and traditionally done by students outside class, is moved into the classroom session; wile what traditionally was done in class [...] is moved outside and prior to the class" (Galindo-Dominguez, 2021:44). In that sense, in order to spend little time on the first step of the R2L 'preparing for reading', the English teacher of the respective groups uploaded the reading text that we would be using for that session to the Aula Virtual. With that objective in mind, students' task was to read the text and write a short summary of what the text was about. As a result, the lesson plan would directly start by eliciting pupils to read their brief summaries and thus, allowing the teacher to check whether they have understood the Spanish text or not.

As previously mentioned, for a further and deeper understanding of the implementation of *Reading to Learn* pedagogy to *mediation*, read Section 5 of this paper. Nevertheless, Appendix 3 contains the more detailed lesson plans for each session in case the reader wants to observe them beforehand.

# 4.4. Methods and procedure of data analysis

After the collection of all the data needed for this paper, it is necessary to account for the procedure for measuring students' performance in their mediation texts and observe its pedagogical implications. In that way, the two main tools that will be used to answer the research questions are: (i) CAF measures and (ii) statistical inference.

#### 4.4.1. CAF measures

Measuring the performance of either oral or written products of L2 learners is key for Second Language Acquisition (SLA) research. In fact, many researchers believe that the productions made by L2 learners are "multi-componential in nature, and that their principal dimensions can be adequately, and comprehensively, captured by the notions of

complexity, accuracy and fluency" (Housen & Kuiken, 2009:461). Therefore, under these circumstances this triangulation, known as CAF (Complexity, Accuracy and Fluency), emerges as the fundamental dimension used to evaluate and analyse the performance of L2 students from a pedagogical perspective. Let us briefly comment on each of them for the reader to have a general overview of the parameters:

- 1. According to Michel (2017:2), *accuracy* can be defined as "a measure for the target-like and error-free use of language". That is to say, the degree in which a learner, that is trying to acquire a L2, creates or formulates correct structures as it is mainly used to identify ungrammaticalities.
- 2. Fluency could be defined as "the smooth, easy and eloquent production of speech with limited numbers of pauses, hesitations or reformulations" (Michel, 2017:2). Basically, it refers to how fast a learner can retrieve and correctly utilize the language in a standard-paced production without noticeable pauses.
- 3. The notion of *complexity* can be described as "the size, elaborateness, richness, and diversity of the L2 performance" (Michel, 2017:2).

Although the three factors are interrelated within this triad, for the present investigation we will only consider *fluency* and *complexity*. The main motivation for doing so comes from the fact that *accuracy* would imply a higher extension of this paper and it would be beyond the established limits. Additionally, to properly study CAF in the written mediations, we have made a correspondence between the main features that were presented in the *CEFR-Companion Volume* (2018:170) and its CAF counterpart so that we could extract quantitative data, as depicted in Table 3.

**Table 3.** Self-assessment grid for mediation, from the CEFR-Companion Volume (2018:170).

MEDIATION	MEDIATING A TEXT		
A1	I can convey simple, predictable information given in short, simple texts like signs and notices, posters, and programmes.		
A2	I can convey the main point(s) involved in short, simple texts on everyday subjects of immediate interest provided these are expressed clearly in simple language.		
B1	I can convey information given in clear, well-structured informational texts on subjects that are familiar or of personal or current interest.		
B2	I can convey detailed information and arguments reliably, e.g. the significant point(s) contained in complex but well-structured, texts within my fields of professional, academic and personal interest.		

C1	I can convey clearly and fluently in well-structured language the significant ideas in long, complex texts, whether or not they relate to my own fields of interest, provided that I can occasionally check particular technical concepts.
C2	I can explain in clear, fluent, well-structured language the way facts and arguments are presented, conveying evaluative aspects and most nuances precisely, and pointing out sociocultural implications (e.g., use of register, understatement, irony, and sarcasm).

Owing to the absence of clear descriptions in the *CEFR-Companion Volume* (2018:170) that allows teachers to evaluate the performance of this skill, this paper has formulated the following ones by paying attention to some of the items that appear in the chart:

- 1. "[...] clear, complex, well-structured information texts": in other words, number of clauses, number of T-units, and their relation (number of clauses per T-unit).
- 2. "[...] fluent language": that is, number of words, clauses, and T-units.
- 3. "[...] I can occasionally check particular technical concepts": in other words, lexical complexity (measured through density as well as variation). Although these two parameters do not specifically measure technicality, I will make reference to it qualitatively.
- 4. "[...] conveying evaluative aspects and most nuances": appraisal density (including *attitude*, *graduation*, and *engagement*) applying the theoretical framework of Appraisal Theory (see Martin & White, 2005).

On this basis, the reader can find below in Table 4, entitled *Measures for the assessment of the written mediation skill*, an overview of all measures to assess the *mediation* skill in relation to the four items selected from the *CEFR-Companion Volume* (2018) as mentioned above.

**Table 4.** Measures for the assessment of the written mediation skill.

	Number of words	[lexical word] + [functional words] = total words	
Fluency	Number of clauses	$\mathrm{XP} = \mathrm{V}_{\scriptscriptstyle [+\mathrm{FINITE}] \; \mathrm{or} \; [-\mathrm{FINITE}]}$	
Truckey	Number of T-units	$T\text{-}Unit = XP_{\text{[MAIN CLAUSE] + [EMBEDDED CLAUSE(S)]}}$	
	Lexical density	$\frac{lexical\ words}{total\ amount\ of\ words} \ge 100 = lexical\ density\ \%$	
Complexity	Lexical variation	$\frac{unique\ lexical\ words}{total\ amount\ of\ lexical\ words} \ge 100 = lexical\ v.\ \%$	

Appraisal		Attitude	$\frac{words \ expressing \ attitude}{total \ number \ of \ words} x \ 100 = attitude \ dens.\%$
		Engagement	$\frac{words\ expressing\ engagement}{total\ number\ of\ words}\ x\ 100 = eng.\ dens.\ \%$
density <sup>6</sup>	Graduation	$\frac{words \ expressing \ graduation}{total \ number \ of \ words} \ x \ 100 = grad. dens. \%$	
	Number of clauses per T-unit		number of clauses number of T — units

#### 4.4.2. Statistical formulations

To check whether the observed differences in terms of CAF and appraisal in students' texts are significant, statistical analysis was applied in order to "draw conclusions about some unknown aspect of a population based on a random sample from that population" (Sinharay, 2010:11).

- The mean was used to add up all the data from each student of each group (section or program) and extract an average for the diverse parameters of CAF.
- Standard deviation allowed the investigation to observe how data for each group was spread out from the expected value.
- Fisher tests were employed to determine whether the two categorical variables (namely bilingual section -*x* and bilingual program -*y* for each of the different measure of CAF) have unequal or equal variance so that we can proceed with the correct t-Test.
- T-Tests is a statistical formula that is applied to "hypothesis testing to determine whether a process or treatment actually has an effect on the population of interest, or whether two groups are different from one another" (Bevans, 2020). In that sense, this study posited for each CAF measure a different T-test with a Null Hypothesis (H<sub>0</sub>) and its Alternative Hypothesis (H<sub>1</sub>). Not only did this allow the study to compare the performance of bilingual section and program in the *premediation*, but also to confirm whether or not there were certain differences for each of the CAF parameters in bilingual section and program after applying R2L.

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<sup>&</sup>lt;sup>6</sup> 'Appraisal density' is an indicator that is created by dividing the number of words referring to (*attitude*, *engagement*, and *graduation*) out of the total number of words. Notice that this notion of 'Appraisal density' has been added to CAF measures for the sake of this investigation. Therefore, to calculate Appraisal density, the formula would be =

# 5. AN INNOVATIVE PROPOSAL OF READING TO LEARN PEDAGOGY: ITS APPLICATION TO MEDIATION

To the best of my knowledge, all the literature (e.g., Rose, 2015; Becerra et al., 2017; Whittaker & Acevedo, 2018) pertaining to the pedagogy of *Reading to Learn* takes as starting point a text through which students will extract its meaning thanks to the help of the teacher so as to develop their writing skill. Notwithstanding, this research paper has gone beyond the mere "instructional approach" (Becerra et al., 2017) and has tried to propose a new insight to this linguistic methodology with the aim of applying it to the current line of investigation: *mediation*. Thus, this constitutes one of the backbones of the present paper as no one has yet applied *Reading to Learn* pedagogy to the fifth language skill, or "fourth mode of activity" as stipulated in the *CEFR-Companion Volume* (2018). Therefore, it is important to devote a thorough explanation as to the manner in which *Reading to Learn* (R2L) has been adapted to prepare students in the new skill that will appear for the first time in the English curriculum for secondary school next academic year 2022-2023.

## 5.1. Justification for implementing *Reading to Learn* to work on mediation

Before getting into details, it is necessary to account for the reasons that have prompted me to employ *Reading to Learn* to teach the new language skill.

*Mediation strategies* inherently entail a series of techniques and procedures with the objective of clarifying the meaning and facilitating the comprehension of a text or an utterance (see Figure 8 below).

#### Mediation strategies

Strategies to explain a new concept

- ► Linking to previous knowledge
- ► Adapting language
- ► Breaking down complicated information

Strategies to simplify a text

- ► Amplifying a dense text
- Streamlining a text

**Figure 8.** *Mediation strategies taken from CEFR-Companion Volume (2018).* 

Hence, as stated in the *CEFR-Companion Volume* (2018:126), "the user/learner's ability to mediate does not only involve being linguistically competent in the relevant

language or languages, it also entails using mediation strategies that are appropriate in relation to the conventions, conditions and constraints of the communicative context". On this basis, observe Table 5, which provides a detailed explanation<sup>7</sup> of each of the strategies as shown in the *CEFR- Companion Volume* (2018:126-127).

**Table 5.** Description of the mediation strategies from CEFR-Companion Volume (2018:126-127).

	LINKING TO PREVIOUS KNOWLEDGE	"[] The mediator may explain new information by making comparisons, by <u>describing how it relates to something the recipient already knows</u> or by helping recipients activate previous knowledge, etc."
STRATEGIES TO EXPLAIN A NEW CONCEPT	ADAPTING LANGUAGE	"The user/learner may need to employ shifts in use of language, style and/or register in order to incorporate the content of a text into a new text of a different genre and register. This may be done through the inclusion of <a href="mailto:synonyms">synonyms</a> , similes, simplification or <a href="mailto:paraphrasing">paraphrasing</a> ."
	BREAKING DOWN COMPLICATED INFORMATION	"Understanding can often be enhanced by <u>breaking</u> down complicated information into constituent parts, and showing how these parts fit together to give the whole picture".
STRATEGIES TO SIMPLIFY A TEXT	AMPLIFYING A DENSE TEXT	"Density of information is often an obstacle to understanding. This scale is concerned with the expansion of the input source (spoken or written) through the inclusion of helpful information, examples, details, background information, reasoning and explanatory comments."
STREAMLINING A TEXT		"This scale is concerned with the opposite to <i>Amplifying</i> in the scale above pruning a written text to its essential message(s). [] Key concepts operationalised in the scale include the following:

The parts of the text underlined in Table 5 show the link between the *mediation* strategies and the principal tenets of *Reading to Learn* pedagogy. In other words, R2L perfectly complies with the main principles governing *mediation* skill as (i) students can link the text with some previous knowledge ("describing how it relates to something the recipient already knows" (Council of Europe, 2018:126)) during the first level of the R2L

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<sup>&</sup>lt;sup>7</sup> The reader must be aware that for the sake of brevity, some parts of the definitions of each strategy have not been included. Therefore, for those who are eager for finding out more, go to pages 126-127 of the *CEFR-Companion Volume* (2018).

pedagogy; (ii) the teacher together with the pupil breaks down the text ("breaking down complicated information into constituent parts" (Council of Europe, 2018:127)) and deconstructs it by giving paraphrases, definitions, synonyms, background information and any necessary explanatory information ("inclusion of helpful information" (Council of Europe, 2018:127)) as it happens at the second level of R2L, where "the teacher expands the information in the sentence, discusses language features, asks the students to relate what they are learning to their experience" (Whittaker, 2018:23); and (iii) throughout the whole process what students will try to do is to highlight key information and to exclude what is not relevant for *mediation* to take place ("streamlining a text" (Council of Europe, 2018:127)). Therefore, it is clear that *Reading to Learn* methodology encodes and underlies the different mediation strategies proposed by the CEFR although it cannot be perceived at first sight. Table 6 below illustrates the connection between the R2L pedagogy and mediation strategies.

**Table 6.** Resemblance between R2L and Mediating strategies.

	READING TO LEARN	MEDIATING STRATEGIES
1° STEP	Preparing before reading	Linking to previous knowledge
2º STEP	Detailed reading	Breaking down complicated information & amplifying a dense text
3° STEP	Note taking	Adapting language & streamlining a text
4° STEP	Joint rewriting	Adapting language

Once we have argued in favour of R2L as a good methodology to be utilised when teaching *mediation* in the secondary classroom, it is necessary to account for the organisation of the R2L lessons as well as the design of the materials, which constitute in itself another innovation of the present paper.

#### 5.2. Lesson planning and material design

Reading to Learn pedagogy takes, as its source, a text written in the same language (students' L1, L2, LX) in which teachers want their students to thrive. So, an important challenge in the present study is how R2L could be applied to *mediation* where the original text is written in the mother tongue of students and the final product is in the L2. Several questions arise: should we incorporate any other steps within the pedagogy? Is it feasible? Or, conversely, might this pose new challenges? This section will try to unravel the previous questions as felicitously as possible.

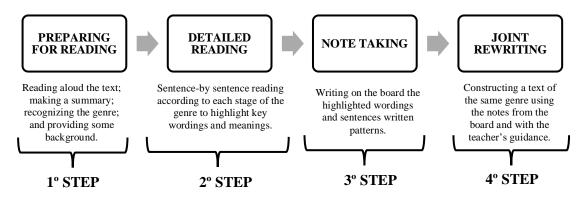
As the proper skill demands, for it to be carried out, there should be two different languages involved in the actual process of communication. In the EFL Spanish secondary classroom it would be both English and Spanish<sup>8</sup>. Thence, applying R2L to *mediation* implies that the departure text must be written in Spanish and the final outcome will be written in English. While the source text (Spanish text) can be seen in Appendix 1, the written mediations (in English) made by students are enclosed in Appendix 2. Hence, the reader can have a glimpse at a short extract of the Spanish text in Figure 9.



**Figure 9.** Short extract of the Spanish text used for mediation.

As a result, beginning the session of R2L with a Spanish text constitutes the first adaptation of this methodology given that students will not be using the same language for reading and for writing as it has been done up to now in the R2L pedagogy.

What is more, apart from the text itself, special attention ought to be given to the different steps that are employed when implementing R2L in the secondary classroom. Figure 10 below depicts the general sequence of activities of the canonical order of this methodology.



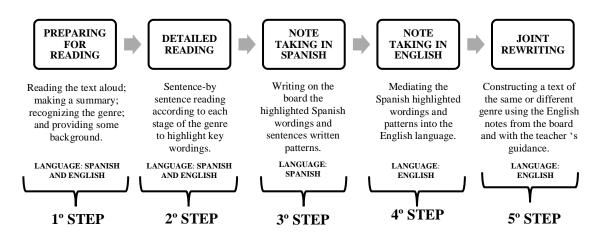
**Figure 10**. Steps in R2L pedagogy, adapted from Rose & Martin (2013).

the procedures will be the same.

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<sup>&</sup>lt;sup>8</sup> A short comment should be made on account of the languages utilised. Given that the present research paper is grounded on the Spanish context, the languages that will be used from this moment onwards will be English and Spanish. Nevertheless, scholars can actually extrapose this model to any other language as

As shown in Figure 10, there seems to be no space for the actual *mediation* to be carried out. However, far from being this a difficult problem, the introduction of a new step can actually be done after the second step 'detailed reading'. That is to say, step three should be bifurcated in two parts under the names of: 'Spanish note taking' and 'English note taking'. Obviously, this inaugurates a new approach to this methodology, thus being a breakthrough within the educational domain as students will read and take notes in Spanish and the teacher will help them with the necessary lexis and structures that are needed in English so that pupils can finally write a new version of that text in a different genre, this time in English. This perfectly demonstrates how the lesson shifts from a Spanish source text onto an English joint rewriting. Figure 11 presents the activity sequence for mediation in EFL using the Reading to Learn pedagogy.



**Figure 11.** Activity sequence for mediation in EFL using R2L.

Consequently, the sequence, shown in Figure 11, would be the archetypical procedure of R2L applied to *mediation*. As the reader might have observed, it is of utmost importance to be aware of the language that we would be employing in each stage. Notice that within the first two steps, all the participants involved in the classroom will be switching from English to Spanish as the text and the summary will be in Spanish while the teacher will be constantly using the English language to pose questions about the text, to recognise the genre to which it ascribes as well as to carry out the interaction with pupils in the 'detailed reading'.

However, albeit the great number of details discussed up to now, there is still one feature that has not been dealt with yet. We should not forget that in R2L it is of prime importance the genre of the text. As earlier alluded, this pedagogy is a genre-based

methodology. Though *mediation* can be done with whatsoever the genre from the ones mentioned earlier in this study or even from everyday life genres (e.g., advertisements, brochures, speeches, etc.), the final outcome can either keep the same stages as the source text, or it can eventually result in another genre according to the type of mediation that learners are asked to do (e.g., email, formal letter, etc.). In that sense, in the latter case, students would have to adapt and map the most relevant information to the stages and phases of the new genre. Once again, this introduces a new step within the pedagogy of R2L since the teacher would have to prepare students to adjust the required information to the new genre. See Figure 12 that clarifies both the implementation of this 'genre-awareness' step as well as 'joint rewriting different genre' step within the activity sequence.

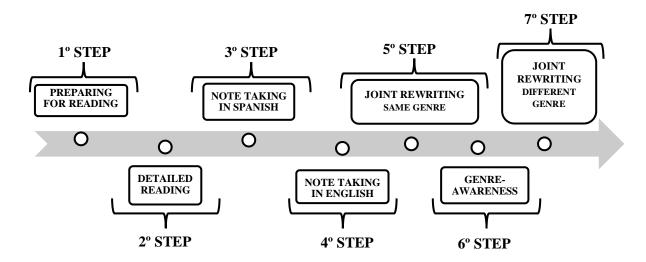


Figure 12. Introduction of the two latter steps within the activity sequence for mediation with R2L.

After presenting the steps of this new activity sequence, it is essential to point out another slight change in the actual teaching of R2L. As some authors (e.g., Becerra et al., 2020; Whittaker, 2018; and Whittaker & Acevedo, 2017) have emphasised, the board plays a pivotal role in the *Reading to Learn* methodology, given that students, with the help of the teacher, write on it during the steps of 'note taking'. This entails that the traditional way to portray R2L on the board would be left aside in favour of a new distribution of the board to which an extra column should be added with the label 'Spanish notes'.

The reader can actually observe in Appendix 4 an example of how the board should look like. Additionally, the reader can also see a real photo taken from the R2L session in Appendix 5, image 6.

### 5.3. Application of the new R2L activity sequence for mediation

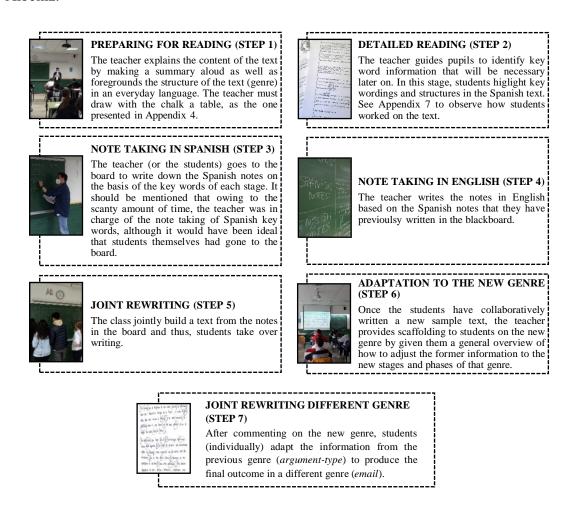
All the theoretical apparatus that has been put forward for the first time in this research constitutes the basis of the lesson plans. Although the reader can find a thorough description of them in Appendix 3, this section will provide an abridged lesson plan that shows the sequences of activities, as presented in Table 7.

**Table 7**. Outlining the lesson development of R2L sessions.

LESSON DEVELOPMENT				
STAGE	TIMING	R2L STEP	DESCRIPTION	
WARM-UP	5 min	PREPARING FOR READING	The teacher explains the content of the text by reading a summary aloud as well as foregrounds the structure of the text (genre) in an everyday language.	
15 min		DETAILED READING: NOTE TAKING IN SPANISH & IN ENGLISH	Detailed reading of each paragraph of the text going sentence by sentence; asking students for key information; and highlighting it. The teacher writes it on the board both in Spanish and English	
MAIN ACTIVITY	5 min	JOINT REWRITING IN ENGLISH (SAME GENRE)	Five volunteers are necessary so as to rewrite each stage of the genre on the blackboard with everyday language.	
	4 min	GENRE-AWARENESS	The moment when the teacher raises students' awareness on the new genre in which they have to write the mediation.	
	20 min	JOINT REWRITING IN ENGLISH (DIFFERENT GENRE)	Students write the mediation after working on the Spanish text while the teacher supervises all the process.	
WRAP-UP	1 min	EMOJI EXIT-TICKET  The teacher gives students a exit ticket' to check the efficit the session.		

It should be mentioned that given the scarce amount of time for a single session (50 minutes) with each group (precisely, 4°B bilingual section and 4°C bilingual program) to accurately carry out R2L methodology, I was not able to perfectly comply with all the different levels of this pedagogy, including the third level as well as some parts of the second level. Nevertheless, part of the teaching practice is to know how to adjust methodologies and materials to the allotted time. On that basis, before both sessions, I

prepared a thorough description of what students were intended to do in the lesson, as presented in Appendix 4. Likewise, Figure 13 includes a brief explanation of how each step of R2L was put into practice, together with an image of the teacher, namely the writer of this current investigation, during the actual teaching in the internships at the I.E.S Isaac Albéniz.



**Figure 13.** *Main steps in the implementation of R2L during my internships.* 

As the reader might have seen in Appendix 1, the material designed for the present investigation is a mediation from an advertisement about the 'Asociación Amigos de la Tierra' (see Figure 9), in which students are intended to write an email to their friend Max. Therefore, with this idea in mind, pupils are using the information in this ad to inform their friend Max about the possibility of joining the association. Hence, the purpose is to inform of what a third party says. Following the school genre<sup>9</sup> map, the text looks like a type of argument as the goal of the writer is to persuade the reader (the

<sup>9</sup> Notice that the genre map and its names are for school genres in content subjects, but the material that has been utilised for the present research is an everyday genre in EFL. That is why I would just call the original

an advertisement (a sort of argument).

receiver of the mail) to join the association to help improve the environment and meet people who want to do the same. In contrast, for the writer of the mail, the purpose is just to inform of the possibility. This means that while the body paragraphs should contain the stages typical of an *argument-genre type*, the outer structure of the mediation must have those of an informal e-mail to a friend, where the greeting, introductory paragraph, ending paragraph as well as the closure are inherent parts of this type of genre (Appendix 6 includes the material that has been used to explain to students how to adapt the advertisement genre to the email genre).

# 6. RESULTS

The main purpose of this section is to provide the results<sup>10</sup> of the analysis of section and program students' performance in the *written mediation* before and after implementing R2L and in comparison, with parallel control groups where no implementation took place. Notice that this part will merely answer the research questions presented in Section 3. A further discussion of the results can be read in Section 7.

With regards to  $RQ_1$ —When working on the written mediation skill, are there any differences between bilingual section students, who have a high exposure to the English language, and bilingual program pupils, whose exposure is more reduced?—the analysis carried out shows that bilingual section students' (BSS) performance differed from bilingual program students' (BPS) texts, as presented in Figures 14, 15, 16, and 17.

Regarding fluency, in terms of the *number of words*, Figure 14 shows that BSS wrote in their mediations an average of 183,78 words/mediation, in contrast to BPS who actually wrote 44,24 words less per mediation (139,54 words/mediation) within the same amount of time. That is to say, the difference between BSS and BPS is 24,07% of words higher in BSS.

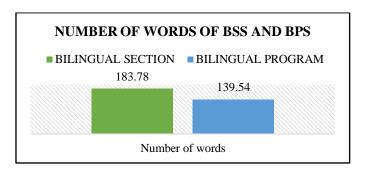
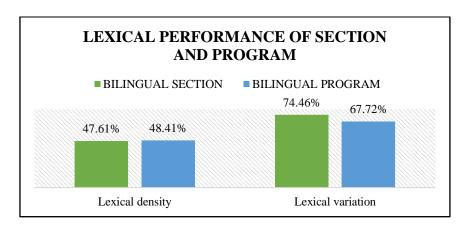


Figure 14. Number of words by BSS and BPS.

Nonetheless, as shown in Figure 15, although BPS use fewer words, their *lexical density* is higher, making a total of 48,41% (67,56 content words/mediation). Conversely, although BSS have written more, their *lexical density* is lower: 47,61%, which corresponds to 87,51 content words/mediation. Notice that there is almost no difference in regard to *lexical density* in both section and program groups. Thus, it seems that the

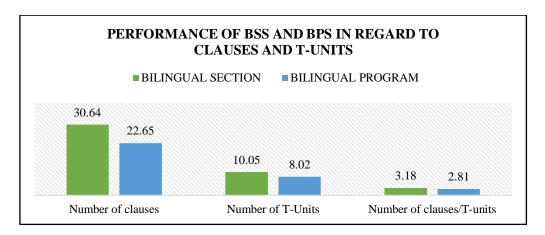
<sup>&</sup>lt;sup>10</sup> A detailed account of the results of each group for each CAF measure, including their averages, and standard deviations are enclosed from Appendix 8 to Appendix 14.

more students write, the more functional words they employ. That may be the reason why BPS, who write fewer words, have a slightly higher level of *lexical density*. Notwithstanding, despite the latter have a higher percentage of *lexical density*, their *lexical variation* is lower than in BSS. That is, BSS tend to repeat less content words than BPS, presenting 74,46% (65,16 unique content words/mediation) against 67,72% (45,46 unique content words/mediation) respectively.



**Figure 15**. Lexical performance by BSS and BPS.

Figure 16 below shows the performance of BSS and BPS with respect to the *number of clauses and T-units*.

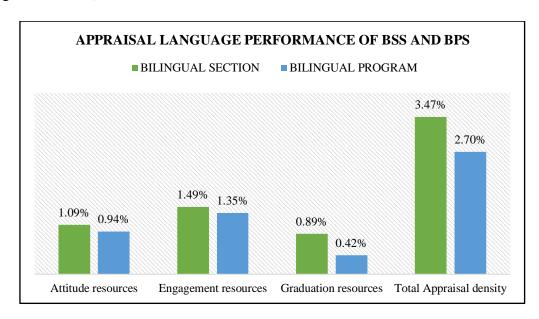


**Figure 16.** Performance in BSS and BPS: clauses and T-units.

Figure 16 illustrates that BSS use a higher *number of clauses* (30,64) per mediation in stark contrast to BPS who have written 22,65 clauses/mediation. That is to say, BSS are more fluent when writing than their peers in bilingual program. Likewise, given that the *number of clauses* is higher in BSS, so is the *number of T-Units*, with an average of 10,05 T-units/mediation. As a result, BPS write fewer sentences as they have a mean of 8 T-units per written mediation. The *number of clauses* that BSS write in a

unique sentence corresponds to 3,18, showing a higher level of complexity if compared to BPS. Indeed, BPS have an average of 2,81 clauses per T-unit which demonstrates that their complexity is more reduced.

Moving on, the other important parameter that is worth mentioning to account for the differences between bilingual section and bilingual program is *appraisal density*, measured to check students' use of language of evaluation in the *mediation* skill (see Figure 17 below).



**Figure 17**. Appraisal language performance by BSS and BPS.

It is clear that BSS use a higher *number of language resources* that show evaluation 3,47% (6,38 words/mediation) in comparison to BPS, who employ almost half of the resources than their peers, namely 3,77 appraisal language words/mediation (2,70%). If we look closer at each type of appraisal, we can clearly notice that BSS write 2,02 words that display *attitude* (1,09%); 2,73 words that convey *engagement* (1,49%); and 1,64 words that express some kind of *graduation* (0,89%). On the contrary, students in bilingual program write a mean of 1,31 words that express *attitude* (0,94%); 1,88 words that display *engagement* (1,35%); and a scanty 0,58 words that convey *graduation* (0,42%). Let us illustrate each of the fields that make up Appraisal theory, by drawing upon some examples (Table 8)<sup>11</sup> extracted from the written mediations that BSS and BPS wrote.

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<sup>&</sup>lt;sup>11</sup> The reader must be aware that there might be mistakes in those tables which collect examples taken from students' written mediations. This was done with the purpose of showing the real performance of pupils regardless of spelling, grammar, and vocabulary mistakes, among others.

**Table 8**. Examples of Appraisal Theory from BSS & BPS.

Appraisal Type		Examples
A 44°4 - J -	BSS	<ul> <li>S<sub>1</sub>: "[] I was so <b>glad</b> to share their information []".</li> <li>S<sub>2</sub>: "[] one association that it's <b>amazing</b>".</li> </ul>
Attitude	BPS	<ul> <li>S<sub>1</sub>: "[] that's wonderful!".</li> <li>S<sub>2</sub>: "I like that you know information about []".</li> <li>S<sub>3</sub>: "[] because is very attractive idea".</li> </ul>
Engagement	BSS	<ul> <li>S<sub>1</sub>: "You have to introduce your identity number, []".</li> <li>S<sub>2</sub>: "[] and you can participate in different debates".</li> <li>S<sub>3</sub>: "[] you would only pay 25 euros annualy".</li> </ul>
	BPS	<ul> <li>S<sub>1</sub>: "You need to put your DNI number []".</li> <li>S<sub>2</sub>: "[] you could participate in her space of opinion."</li> </ul>
Graduation	BSS	<ul> <li>S<sub>1</sub>: "[] for you to know a little bit about []":</li> <li>S<sub>2</sub>: "[] many more interesting facts."</li> </ul>
	BPS	<ul> <li>S<sub>1</sub>: "They have a lot of missions".</li> <li>S<sub>2</sub>: "[] they can propose many solutions to the world".</li> </ul>

Heretofore, all the data shown and commented is based on the average results obtained for both BSS and BPS of our sample. However, to analyse whether the observed differences that we have previously spotted are significant or not for a population, I applied statistical analysis.

Before showing the statistical results, the reader should be aware that for a correct T-test to be caried out we need to have previously done *Fisher test* that allows us to determine [p-value  $< \alpha = 0.05$ ] or [p-value  $> \alpha = 0.05$ ]. In the former case, the population variances are unequal and as such, we have to conduct a *t-Test sample assuming unequal variances*, or in the latter case, the population variances are equal and thus, we have to apply a *t-Test sample assuming equal variances*. Table 9 below is a brief summary of the main results extracted from the specific application of each t-Test to each of the different independent variables that we have studied earlier.

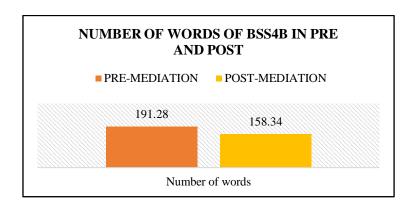
	INDEPENDENT VARIABLES	HYPOTHESIS	ANALYSIS OF THE DATA
Number of words:	x = number of words in section.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$	As p-value = 4,47174E-07, therefore, p-value $< \alpha$ , so we reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that
contrast of hypothesis	y= number of words in program.	where $\alpha = 0.05$	BSS present a higher mean of words than BPS.
Number of clauses	x = number of clauses in section.	$H_0$ : $\mu_x \leq \mu_y$	As p-value = 2,75052580E-07, therefore, p-value $< \alpha$ , so we
Number of clauses: contrast of hypothesis	y= number of clauses in program.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that BSS present a higher mean of clauses than BPS.
Number of T-units:	x = number of T-units in section.	$H_0$ : $\mu_x \leq \mu_y$	As p-value = 8,660907E-05, therefore, p-value $< \alpha$ , so we
contrast of hypothesis	y= number of T-units in program.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that BSS present a higher mean of T-units than BPS.
Number of lexical	x = lexical density in section.	$H_0$ : $\mu_x \leq \mu_y$	As p-value = 2,51912E-06, therefore, p-value $< \alpha$ , so we
density: contrast of hypothesis	y= lexical density in program.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that BSS present a higher mean of lexical density than BPS.
Number of lexical	x = lexical variation in section.	$H_0$ : $\mu_x \leq \mu_y$	As p-value = 1,02910E-09, therefore, p-value $< \alpha$ , so we
variation: contrast of hypothesis	y= lexical variation in program.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that BSS present a higher mean of lexical variation than BPS.
Number of total	x = total appraisal density in section.	$H_0$ : $\mu_x \leq \mu_y$	As p-value = 3,50806E-06, therefore, p-value $< \alpha$ , so we
appraisal density: contrast of hypothesis	y= total appraisal density in program.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that BSS present a higher mean of appraisal density than BPS.
Number of clauses/T-	x = number of clauses/T-units in section.	$H_0$ : $\mu_x \leq \mu_y$	As p-value = 1,41171E-02, therefore, p-value $< \alpha$ , so we
units: contrast of hypothesis	y= number of clauses/T-units in program.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis (H <sub>0</sub> ). This allows us to state that BSS present a higher mean of clauses/T-units than BPS.

 Table 9. Results from the t-Test applied to the comparison of bilingual section and bilingual program.

As the reader might have realised, the assorted t-Test utilised have proven that by statistical analysis the findings that we have stipulated for our sample are confirmed, except for *lexical density* which differs from the sample. In other words, each p-value of every t-Test that we have done, has rejected the Null hypothesis (H<sub>0</sub>). Given that we reject the Null Hypothesis (H<sub>0</sub>) in each t-Test, it implies that H<sub>1</sub> (our alternative hypothesis) is correct. Therefore, we can conclude that population variables related to BSS are higher than those of BPS as the alternative hypotheses employed in all the cases shows that the population mean of BS is higher than the population mean of BS, that is H<sub>1</sub>:  $\mu_x > \mu_y$ . Nevertheless, it is worth noticing that for the parameter of *lexical density*, although the sample shows that BPS have a higher density regarding unique words (48,41% in contrast to 47,61% of BSS), the T-test has demonstrated that for a population it will be BSS the ones who have the higher number of *lexical density* as we have rejected H<sub>0</sub>.

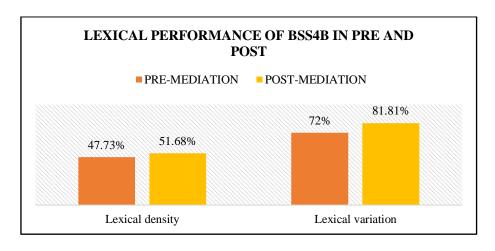
With regard to RQ<sub>2</sub> — Are there any effects of the implementation of the R2L pedagogy on bilingual section students' performance in the written mediation skill? — this research paper reveals that there are some features of CAF measures that are improved after the implementation of *Reading to learn* methodology. See Figures 18, 19, 20, and 21 that account for the performance of bilingual section students (BSS) in the *pre-mediation* (PRE) and *post-mediation* (POST). Nonetheless, the reader should bear in mind that R2L has only been applied to one group of students from bilingual section, namely 4°B (BSS4B).

To begin with, concerning the total *number of words*, as shown in Figure 18 below, BSS4B wrote in their PRE an average of 191,28 words in contrast to the POST in which they wrote 158,34 words. That is to say, the difference between the PRE and POST mediations corresponds to a variability of 32,94 words less per mediation after the R2L methodology. This can be explained by the fact that students had less time to write the mediation: 35 min for the PRE but 25 min for the POST. Therefore, this may have had an effect on the *number of words* they wrote.



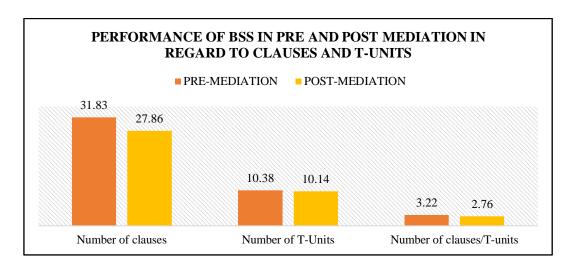
**Figure 18.** Number of words by BSS4B in PRE and POST.

Nonetheless, after working with students in this instructional-based methodology, the *lexical density* is slightly higher in the POST 51,68% in contrast to the PRE 47,73%. Nevertheless, the most striking feature is that BSS4B have increased the number of unique words in the POST mediation with respect to the previous one. That is to say, while in the PRE BSS4B have only written 72% of content words, in the POST they have a broader level of vocabulary since the unique content words are higher 81,81%. Almost eight out of ten lexical words are unique, or in turn not being repeated. This remarkable issue will be dealt with more in depth in the discussion section.



**Figure 19.** Lexical performance by BSS4B in PRE and POST mediation.

Figure 20 shows the performance of BSS4B both in the PRE and POST mediations with respect to the *number of clauses* and *T-units and clause per T-unit*.



**Figure 20.** Performance by BSS4B in PRE and POST mediation in clauses and T-units.

Figure 20 demonstrates that BSS4B still have a higher *number of clauses* (31,83 clauses/mediation) in the PRE in stark contrast to the POST in which they have reduced the *number of clauses*, constituting 22,65 clauses/POST mediation. Once again, this could be explained by the fact that students had a more limited amount of time with respect to the PRE mediation. Likewise, given that the *number of clauses* is higher in the PRE, so is the *number of T-units* in the PRE, with an average of 10,38 T-units/PRE mediation. Conversely, in the POST mediation in spite of the scanty amount of time, BSS4B wrote fewer clauses, but still kept a similar *number of T-units* as the sample mean is of 10 T-units per POST mediation. In the PRE, every T-unit encodes 3,22 clauses. In contrast, in every single sentence of the POST mediations, BSS4B include up to 2 or 3 clauses, showing a lower level of complexity if compared to the PRE. Nevertheless, despite those dissimilarities, it could be stated that BSS4B are fluent and complex at all moments (lexical density, variation, clauses/T-units), whether they are left alone or if they followed a methodology in the classroom.

In a similar vein, the other important parameter that is worth examining to reach some neater conclusions about the main differences between applying R2L or not in bilingual section is by looking at *appraisal density* to check students' use of language of evaluation in the mediation skill (see Figure 21 below).

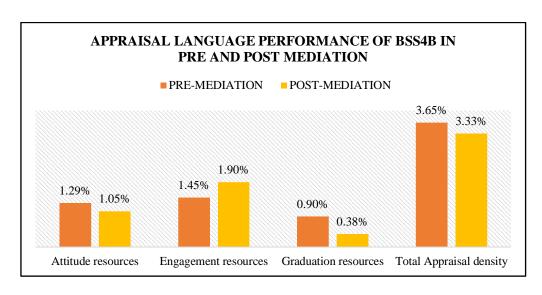


Figure 21. Appraisal language performance by BSS4B in PRE and POST mediation.

As depicted in Figure 23, it is clear that the PRE mediation has a higher number of resources that show evaluation 3,95% (6,93 words/mediation) in comparison to the POST which only has 3,33% (5,34 appraisal language words/mediation). Hence, when carrying out the PRE, two fields out of three of appraisal theory are higher than in the POST, namely *attitude* corresponding to 1,29% out of the total amount of words, and *graduation* 0,90% out of the total amount of words. However, what is more relevant in the POST mediation is the fact that although *attitude* and *graduation* decrease, this phenomenon does not happen with *engagement resources* which have increased their employment (1,90%) if compared to the PRE (1,45%) in almost one more linguistic resource expressing *engagement* per mediation. This remarkable aspect will be later on discussed in the following section as it is directly related to the implementation of R2L pedagogy. Table 10 below shows examples of Appraisal extracted from the written mediations that BSS4B have done before and after the application of R2L.

**Table 10**. Examples of Appraisal Theory extracted from BSS4B in their PRE and POST mediations.

Appraisal type		Examples		
	PRE	<ul> <li>S<sub>1</sub>: "It is such a stunning country".</li> <li>S<sub>2</sub>: "I hope this is useful".</li> </ul>		
Attitude	POST	<ul> <li>S<sub>1</sub>: "I hope that you like it".</li> <li>S<sub>2</sub>: "I am so plessure helping you with the language".</li> </ul>		

		• S3: "It is <b>great</b> to hear from you".	
Engagement	PRE	<ul> <li>S<sub>1</sub>: "[] you would only have to pay 25 euros year".</li> <li>S<sub>2</sub>: "Also, you must know the prices for be member".</li> <li>S<sub>3</sub>: "I knew I had to help you with it".</li> </ul>	
	POST	<ul> <li>S<sub>1</sub>: "The ad says they're an environmental []".</li> <li>S<sub>2</sub>: "To participate in the campaign you must involve citizenship".</li> </ul>	
	PRE	<ul> <li>S<sub>1</sub>: "They also have many resources that []"</li> <li>S<sub>2</sub>: "Our companies are very worried, they []"</li> </ul>	
Graduation	POST	<ul> <li>S<sub>1</sub>: "In Madrid we have a very good association []":</li> <li>S<sub>2</sub>: "[] the association is really interesting."</li> </ul>	

Up to now, all the data shown and commented with regards to  $RQ_2$  is based on the average results obtained for both the PRE and POST mediation of our sample. However, to analyse whether the observed differences that we have previously spotted are significant or not for the population, I applied statistical analysis. To do so, we will follow the same procedure as it has been done for  $RQ_1$ . Table 11 displays the results obtained from the t-Test that we have applied to the comparison of the PRE and POST mediation for BSS4B. Notice that we have used *t-Test paired two samples for means* where the significance level is 0,05.

On the basis of Table 11, it should be noted that this paper has employed a *paired t-Test* because we want to compare the means of two measurements taken from the same individuals in two different moments: the PRE mediation where students have not received any sort of guidance by the teacher, and the POST mediation in which pupils have previously been working with the methodology of *Reading to Learn*. Having said that, as the reader might have perfectly observed, the different *paired t-Test* employed have proven that the findings that we have stipulated for our sample are confirmed by statistical analysis.

On the one hand, on the light of the aforementioned results, applying *Reading to* Learn pedagogy does not trigger any improvement on the number of words [p-value  $(2,18172E-07) < \alpha$ ]; number of clauses [p-value  $(1,3537E-05) < \alpha$ ]; lexical density

(number of content words) [p-value  $(1,12E-04) < \alpha$ ]; attitude resources [p-value  $(0,0161944) < \alpha$ ]; graduation resources [p-value  $(2,70E-04) < \alpha$ ]; appraisal density [p-value  $(0,013312) < \alpha$ ]; and clause/T-unit [p-value  $(9,89E-03) < \alpha$ ]. However, students, after working with R2L, show a significant increase in their number of T-units [p-value  $(0,319879) > \alpha$ ]; lexical variation (unique content words that are not repeated) [p-value  $(0,3513699) > \alpha$ ]; and engagement resources [p-value  $(0,2750684) > \alpha$ ]. Obviously, this constitute a fundamental piece of evidence to demonstrate that by using R2L in the secondary classroom, pupils' results are enhanced in relation to number of T-units, unique content words and tokens expressing engagement. So, it could be argued that R2L does improve BSS4B outcomes. Nevertheless, the reader can find a more acute explanation in the subsequent section of the paper where the repercussions of R2L in these domains will be made explicit.

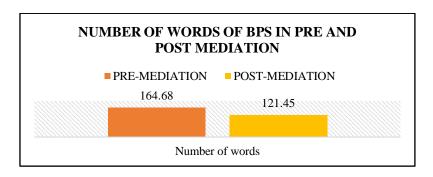
 Table 11. Results of t-Test from BSS4B in the PRE and POST mediation.

	VARIABLES	HYPOTHESIS	ANALYSIS OF THE DATA
Number of words:	x = number of words in PRE.	$H_0$ : $\mu_x \le \mu_y$	As data shows, p-value = 2,18172E-07, so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative hypothesis (H <sub>1</sub> ) must be taken as correct. In other words, the number
contrast of hypothesis	y= number of words in POST.	H <sub>1</sub> : $\mu_x > \mu_y$ where $\alpha = 0.05$	of words in the PRE is higher than the number of words of the POST.
Number of clauses:	x = number of clauses in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$	As data shows, p-value = 1,3537E-05, so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative hypothesis (H <sub>1</sub> ) must be taken as correct. In other words, the number of clauses in the PRE is higher than the number of clauses of the POST.
contrast of hypothesis	y= number of clauses in POST.	where $\alpha = 0.05$	
Number of T-units: contrast of hypothesis	x = number of T-units in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$	As data shows, p-value = 0,319879829, so p-value > $\alpha$ , and thus, there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must continue with H <sub>0</sub> . In other words, the number of T-units in the POST is higher than the number of T-units of the PRE. For these variables ( $x$ and $y$ ), we can say that R2L methodology certainly has an effect on the number of T-units that students write.  As data shows, p-value = 1,12E-04, so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H0). This implies that the alternative hypothesis (H <sub>1</sub> ) must be taken as correct. In other words, lexical density in the PRE is higher than lexical density of the POST.
	y= number of T-units in POST.	where $\alpha = 0.05$	
Number of lexical density: contrast of hypothesis	x = lexical density in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	
	y= lexical density in POST.		

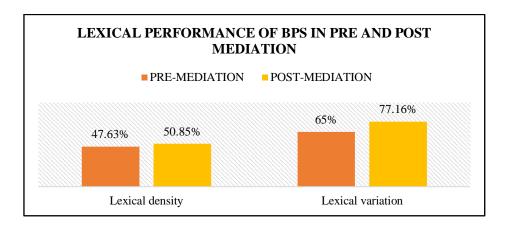
Number of lexical variation: contrast of hypothesis	x = lexical variation in PRE.  y= lexical variation in POST.	$H_0:  \mu_x \leq \mu_y$ $H_1:  \mu_x > \mu_y$ where $\alpha = 0.05$	As data shows, p-value = 0,351369936, so p-value > $\alpha$ , so there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must continue with H <sub>0</sub> . In other words, lexical variation in the POST is higher than lexical variation of the PRE.
Number of attitude resources: contrast of hypothesis	x = number of attitude resources in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	As data shows, p-value = 0,0161944, so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative hypothesis (H <sub>1</sub> ) must be taken as correct. In other words, attitude resources in the PRE are higher than attitude resources in the POST.
	y= number of attitude resources in POST.	where a 0,03	resources in the rate ingree than actual resources in the ross in
Number of engagement resources: contrast of	x = number of engagement resources in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$	As data shows, p-value = 0,2750684, so p-value > $\alpha$ , and thus there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must continue with H <sub>0</sub> . In other words, engagement resources in the POST are higher than engagement in the PRE.
hypothesis	y= number of engagement resources in POST.	where $\alpha = 0.05$	
Number of graduation	x = number of graduation resources in PRE.	$H_0$ : $\mu_x \le \mu_y$	As data shows, p-value = $2,70E-04$ , so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative
resources: contrast of hypothesis	y= number of graduation resources in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	hypothesis $(H_1)$ must be taken as correct. In other words, graduation resources in the PRE are higher than graduation resources in the POST.
Number of total appraisal density: contrast of hypothesis	x = total appraisal density in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$	As data shows, p-value = $0.013312524$ , so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative hypothesis (H <sub>1</sub> ) must be taken as correct. In other words, appraisal
	y= total appraisal density in POST.	where $\alpha = 0.05$	density in the PRE is higher than appraisal density in the POST.
Number of clauses/T- units, contrast of hypothesis	x = number of clauses/T-units in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = $9.89E-03$ , so p-value < $\alpha$ , and thus, we
	y= number of clauses/T-units in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	reject the Null Hypothesis $(H_0)$ . This implies that the alternative hypothesis $(H_1)$ must be taken as correct. In other words, the relation of clauses/T-UNITS in the PRE is higher than in the POST.

With regard to RQ<sub>3</sub> — Are there any effects of the implementation of the R2L pedagogy on bilingual program students' performance in the written mediation skill? — the analysis shows that there are some features of CAF measures that are better after the implementation of *Reading to learn* methodology. Figures 22, 23, 24, and 25 compare the performance of bilingual program students (BPS) in the *pre-mediation* (PRE) and *post-mediation* (POST) in group 4°C (BPS4C), where R2L was implemented.

Concerning the total *number of words*, Figure 22 shows that bilingual program students wrote in their PRE an average of 161,68 words in contrast to the POST in which they wrote 121,45 words. In other words, the difference between the PRE and POST mediations corresponds to a variability of 43,23 words less per mediation after the R2L methodology. As in the case of bilingual section group, this can be explained by the fact that pupils had less time to write the mediation: 35 min for the PRE whereas 25 min for the POST (including 5 minutes of extra time). This has obviously a direct repercussion on the *number of words* they wrote. Conversely, though students have employed fewer words as a whole in their POST, the number of content words have increased (see Figure 23 below). That is to say, after working with R2L, the *lexical density* is slightly higher in the POST 50,85% than in the PRE 47,63%. Notice that the fewer words they have written in the POST, the more content words they have; as opposed to that, the higher the number of words, the lower the *lexical density* (as in the PRE). Additionally, the most striking feature is that BPS4C have more unique content words in the POST mediation with respect to the PRE. While in the latter BPS4C used 65% of unique lexical words, in the POST they have a broader level of vocabulary since the percentage of unique content words is higher, making a total of 77,16% of lexical variation. Almost seven out of ten content words are unique, which means that are not repeated. This remarkable issue will be dealt more in depth in the discussion section, but already shows the positive effect of the implementation of R2L.

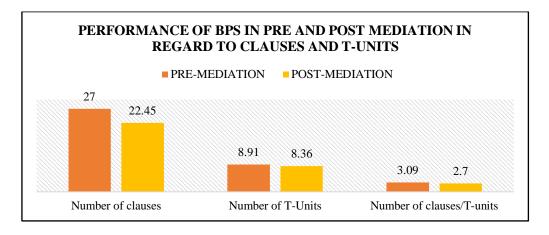


**Figure 22**. *Number of words by BPS in PRE and POST.* 



**Figure 23.** *Lexical performance by BPS4C in PRE and POST mediation.* 

Figure 24 shows the performance of bilingual program students in 4C both in the PRE and POST mediations with respect to the *number of clauses* and *T-units* together with the *number of clauses per T-units*.

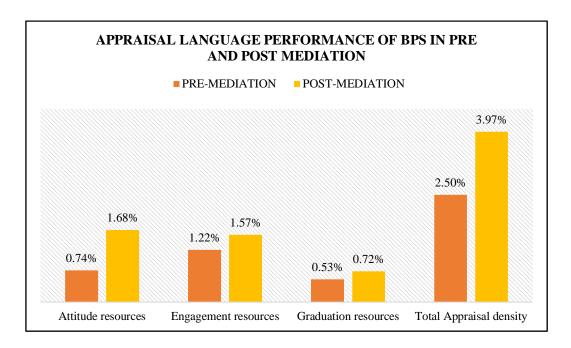


**Figure 24**. Performance by BPS4C in PRE and POST mediation in clauses and T-units.

Several conclusions can be drawn from Figure 24 above. Firstly, BPS4C used a higher *number of clauses* (27 clauses/mediation) in the PRE in stark contrast to the POST in which they have reduced the *number of clauses*, constituting 22,45 clauses/POST mediation. As alluded earlier, this could be explained by the fact that pupils had a more limited amount of time with respect to the PRE mediation. Similarly, the *number of T-units* in the PRE is also slightly higher, with an average of 8,91 T-units/PRE mediation. Conversely, in the POST mediation, in spite of the scanty amount of time, BPS4C wrote fewer subordinate clauses, but still kept almost the same number of T-units as the sample mean is of 8,36 T-units per POST mediation. Regarding the relation between clauses and T-units, every T-unit encodes 3,09 clauses. In contrast, in every single sentence of the

POST mediation, BPS4C include up to 2 or 3 clauses, showing a slightly lower level of complexity if compared to the PRE. Nevertheless, despite those slight differences, it could be stated that BPS4C are fluent and complex at all moments, whether they are let alone or after the implementation of R2L methodology.

As in the case of bilingual section group, *appraisal density* was analysed to check students' use of evaluative language in the *mediation* skill (see Figure 25 below).



**Figure 25.** Appraisal language performance by BPS4C in PRE and POST mediation.

As presented in Figure 25, the POST mediation has a higher number of linguistic resources that express evaluation, 3,97% (or, 4,5 words/POST mediation), in comparison to the PRE, which only has 2,50% corresponding to 4,18 appraisal words/PRE mediation. Thence, after the POST, the three fields in appraisal theory are higher: *attitude* (1,68% - 1,81 word/mediation), *engagement* (1,57% -1,95 words/mediation), and *graduation* (0,72% -0,73 word/mediation). Consequently, what is more revealing in the POST mediation is the fact appraisal language increases if compared to the PRE. This result will be discussed in the following section as it is directly related to the implementation of R2L pedagogy. Table 12 below illustrates different type of Appraisal, extracted from the written mediations that BPS4C have done before and after the application of the R2L.

**Table 12**. Examples of Appraisal Theory extracted from BPS4C in their PRE and POST mediations.

Appraisal type		Examples
Attitude	PRE	<ul> <li>S<sub>1</sub>: "[] because the environment is one of the most important things that we have in our planet".</li> <li>S<sub>2</sub>: "I like that you know information about [].</li> <li>S<sub>3</sub>: "I'm sure you will like it".</li> </ul>
	POST	<ul> <li>S<sub>1</sub>: "Here all is <b>fine</b>".</li> <li>S<sub>2</sub>: "[] it's a <b>good</b> idea for you."</li> <li>S<sub>3</sub>: "[] his goals are too <b>good</b> if you want to try":</li> </ul>
Engagement	PRE	<ul> <li>S<sub>1</sub>: "They have got a wep and you can exploring in ther".</li> <li>S<sub>2</sub>: "You must to pay with target or credit card []".</li> <li>S<sub>3</sub>: "[] and they believe they can propose many solutions to the world".</li> </ul>
	POST	<ul> <li>S<sub>1</sub>: "The ads says they denounce and put pressure".</li> <li>S<sub>2</sub>: "It also mentions that you would give your ID number, []".</li> <li>S<sub>3</sub>: "I can help you to traduce information []".</li> </ul>
Graduation	PRE	<ul> <li>S<sub>1</sub>: "I know you are <b>really</b> interested about the environment and []".</li> <li>S<sub>2</sub>: "[] and they consider participation to be <b>very</b> important".</li> </ul>
	POST	<ul> <li>S<sub>1</sub>: "I'm very happy to hear from you Max".</li> <li>S<sub>2</sub>: "I know you are going to live in Madrid a few months.</li> </ul>

Heretofore, all the data displayed and analysed with regards to RQ<sub>3</sub> is based on the average results obtained for both the PRE and POST mediation of our sample. Nevertheless, to determine whether the observed differences that we have previously commented are significant or not for the population, as in the case of the bilingual section group, I applied statistical analysis employing as population variables each of the different parameters formulated in CAF measures both for the PRE and POST variables. To do so, I follow the same procedure as for RQ<sub>1</sub> and RQ<sub>2</sub>. Table 13 below shows the results obtained from the t-Test comparing the PRE and POST mediation for BPS4C. Notice that in this case, as with RQ<sub>2</sub>, the t-Test are correlated because the variables that

are tested are done with the same sample in two different moments: the PRE mediation where bilingual program students have not received yet any sort of guidance by the teacher, and the POST mediation in which bilingual program pupils have been taught with the methodology of *Reading to Learn*. That is why we have employed *t-Test paired two samples for means* where the significance level is 0,05.

The results in Table 13 show that the findings that we have stipulated for our sample are confirmed by statistical analysis. In the light of the results, applying *Reading to Learn pedagogy* in bilingual program does not trigger any improvement in the *number of words* [p-value (1,81979E-05) <  $\alpha$ ]; *number of clauses* [p-value (7,88E-03) <  $\alpha$ ]; *lexical density* (number of content words) [p-value (1,12E-03) <  $\alpha$ ]; and *clause/T-unit* [p-value (5,86E-03) <  $\alpha$ ]; However, after implementing R2L, there have been a significant change in the following parameters of CAF: *number of T-units* [p-value (0,1861974) >  $\alpha$ ]; *lexical variation* [p-value (0,15594106) >  $\alpha$ ]; *attitude resources* [p-value (0,061872344) >  $\alpha$ ]; *engagement resources* [p-value (0,429431117) >  $\alpha$ ]; *graduation resources* [p-value (0,375124781) >  $\alpha$ ]; and *appraisal density* [p-value (0,31191) >  $\alpha$ ].

Therefore, the previous findings turn out to be a fundamental piece of evidence to demonstrate that applying R2L in the secondary classroom would certainly have benefits given that bilingual program pupils' results have improved in some respects.

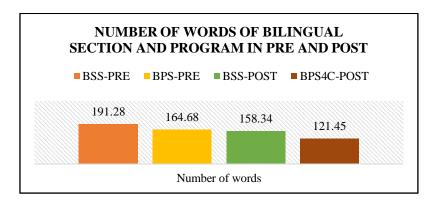
 $\textbf{Table 13.} \ \textit{Results of t-Test from BPS4C in the PRE and POST mediation}.$ 

	VARIABLES	HYPOTHESIS	ANALYSIS OF THE DATA
Number of words:	x = number of words in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = 1,81979E-05, so p-value $< \alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative hypothesis (H <sub>1</sub> )
contrast of hypothesis	y= number of words in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	must be taken as correct. In other words, the number of words in the PRE is higher than the number of words of the POST.
Number of clauses:	x = number of clauses in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = 7,88E-03, so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H <sub>0</sub> ). This implies that the alternative hypothesis (H <sub>1</sub> )
contrast of hypothesis	y= number of clauses in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	must be taken as correct. In other words, the number of clauses in the PRE is higher than the number of clauses of the POST.
Number of T-units: contrast of hypothesis	x = number of T-units in PRE.	H <sub>0</sub> : $\mu_x \leq \mu_y$	As data shows, p-value = $0.186197476$ , so p-value > $\alpha$ . Thus, there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must
	y= number of T-units in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	continue with $H_0$ . In other words, the number of T-units in the POST is higher than the number of T-units of the PRE. For these variables (x and y), we can say that R2L methodology certainly has an effect on the number of T-units that students write.
Number of lexical density: contrast of	x = lexical density in PRE.	$H_0$ : $\mu_x \le \mu_y$ $H_1$ : $\mu_x > \mu_y$	As data shows, p-value = 1,12E-03, so p-value < $\alpha$ , and thus, we reject the Null Hypothesis (H0). This implies that the alternative hypothesis (H <sub>1</sub> ) must be taken as correct. In other words, lexical density in the PRE is higher than lexical density of the POST.
hypothesis	y= lexical density in POST.	where $\alpha = 0.05$	
Number of lexical variation: contrast of hypothesis	x = lexical variation in PRE.	$H_0$ : $\mu_x \le \mu_y$	As data shows, p-value = $0.15594106$ , so p-value > $\alpha$ . Thus, there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must continue with H <sub>0</sub> . In other words, lexical variation in the POST is higher
	y= lexical variation in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	than lexical variation of the PRE. For these variables (x and y), we can say that R2L methodology certainly has an effect on the number of lexical variation that students write.

Number of attitude resources: contrast of hypothesis	x = number of attitude resources in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = $0.061872344$ , so p-value > $\alpha$ . Thus, there is not enough statistic evidence to reject the Null Hypothesis (H0) and we must continue with H0. In other words, attitude resources in the POST are
	y= number of attitude resources in POST.	H <sub>1</sub> : $\mu_x > \mu_y$ where $\alpha = 0.05$	higher than attitude resources of the PRE. For these variables (x and y), we can say that R2L methodology certainly has an effect on the number of attitude resources that students write.
Number of engagement	x = number of engagement resources in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = $0.429431117$ , so p-value > $\alpha$ . Thus, there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must
Number of engagement resources: contrast of hypothesis	y= number of engagement resources in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	continue with H <sub>0</sub> . In other words, engagement resources in the POST are higher than engagement resources in the PRE. For these variables (x and y), we can say that R2L methodology certainly has an effect on number of engagement resources that students write.
Number of graduation resources: contrast of hypothesis	x = number of graduation resources in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = $0.375124781$ , so p-value > $\alpha$ . Thus, there is not enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must
	y= number of graduation resources in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	continue with H <sub>0</sub> . In other words, graduation resources in the POST are higher than graduation resources in the PRE. For these variables (x and y), we can say that R2L methodology certainly has an effect on the number of graduation resources that students write.
Number of total	x = total appraisal density in PRE.	$H_0$ : $\mu_x \leq \mu_y$	As data shows, p-value = 0,311910086, so p-value > $\alpha$ . Thus, there is no enough statistic evidence to reject the Null Hypothesis (H <sub>0</sub> ) and we must
Number of total appraisal density: contrast of hypothesis	y= total appraisal density in POST.	$H_1$ : $\mu_x > \mu_y$ where $\alpha = 0.05$	continue with H <sub>0</sub> . In other words, appraisal density in the POST is higher than appraisal density in the PRE. For these variables (x and y), we can say that R2L methodology certainly has an effect on the total appraisal density that students write.
Number of clauses/T- units, contrast of hypothesis	x = number of clauses/T-units in PRE.	$H_0$ : $\mu_x \le \mu_y$	As data shows, p-value = 5,86E-03, so p-value < $\alpha$ , and thus, we reject
	y= number of clauses/T-units in POST.	H <sub>1</sub> : $\mu_x > \mu_y$ where $\alpha = 0.05$	the Null Hypothesis $(H_0)$ . This implies that the alternative hypothesis $(H_1)$ must be taken as correct. In other words, the relation of clauses/T-UNITS in the PRE is higher than in the POST.

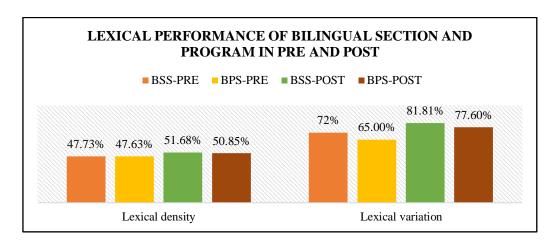
With regards to RQ<sub>4</sub> — Are there any differences in the effects of the application of the R2L pedagogy across bilingual section and program groups? — in a general sense, there is not such a difference in the performance of bilingual section students (BSS) and bilingual program students (BPS) after the implementation of R2L methodology apart from some parameters that will be mentioned below. Figures 26, 27, 28, and 29 below contrast BSS and BPS with respect to the *pre-mediation* (PRE) and *post-mediation* (POST) that each group has done.

Concerning the *number of words*, as presented in Figure 26, BSS write in their mediations more words both in the PRE and POST mediation (191,28 and 158,34, respectively) in stark contrast to BPS who write 164,68 words in the PRE and 121,45 in the POST. Therefore, in spite of the fact that BS and BP pupils had the same amount of time to write, BSS still write more words even after the implementation of R2L methodology, which shows that they are more fluent than their peers.



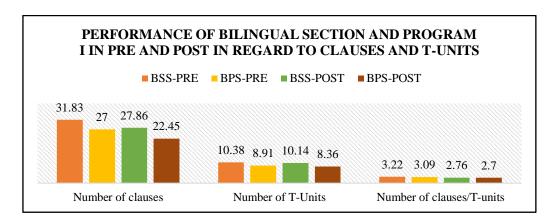
**Figure 26.** Number of words by BSS and BPS in PRE and POST.

Likewise, as shown in Figure 27 below, the *lexical density* of BSS and BPS is somehow similar in the PRE (47,73% and 47,63%), but not in the POST where there is a small variation in which BSS have a 0,83% more of content words in their mediations. Nevertheless, it is true that this slight change does not constitute a remarkable piece of evidence. However, what is interesting is that both BSS and BPS perform better *in lexical variation* after R2L pedagogy. Notice that there is a difference of 9,81% more unique lexical words in BSS and 12,6% more unique content words in BPS between the PRE and POST. Although both BS and BP pupils improve their written mediation in regard to this parameter, this effect is even higher in the case of bilingual program students whose variation is nearly 13% more unique words per mediation. Consequently, this reveals that the R2L methodology has been effective in this parameter as well, for both groups.



**Figure 27.** Lexical performance by BSS and BPS in PRE and POST.

Figure 28 below compares the students' performance with respect to the *number* of clauses and *T-units* and clauses/*T-unit*.



**Figure 28.** *Performance by BSS and BPS in PRE and POST in clauses and T-units.* 

As Figure 28 illustrates, BSS used a higher *number of clauses* before and after the implementation of R2L pedagogy if compared with BPS. In other words, whereas section students have written 31,83 clauses in the PRE and 27,86 clauses in the POST, program pupils have an average of 27 clauses in the PRE and 22,45 clauses in the POST. The *number of T-units* remains the same: BSS have 10,38 T-units in the PRE and 10,14 T-units in the POST in contrast to BPS who have 8,91 T-units in the PRE and 8,36 T-units in the POST. This goes in direct relation to the *number of clauses per T-units* in which both BSS and BPS write nearly the same *clauses per T-unit* in the PRE and POST mediation (3,22 BSS in PRE and 2,09 BPS in PRE vs. 2,76 BSS in POST and 2,7 BPS in POST). Thence, the data shown in Figure 28 demonstrate that although BSS are more fluent and show slightly higher grammatical complexity in clauses and T-units than their mates in bilingual program, the difference is very minimal. Indeed, it seems that R2L

does not trigger any effect on grammatical structures neither in bilingual section nor bilingual program. This will be further expanded in the subsequent section of this paper.

Up to now, we have argued that there are not great differences between BSS and BPS when applying R2L pedagogy. Both groups behave similarly as their *lexical* variation increases and, conversely, the grammatical complexity of the written mediations keep the same as if R2L had not had any effect on it. Figure 29 below shows the differences and similarities in the use of Appraisal.

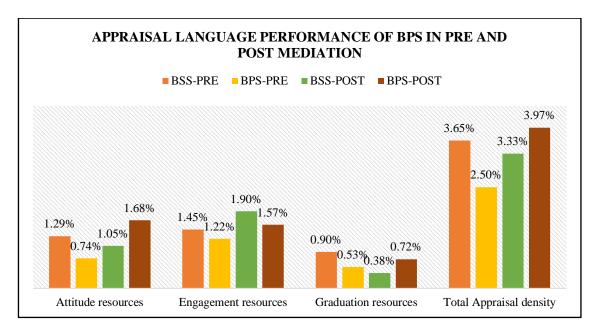


Figure 29. Appraisal language performance by BSS and BPS in PRE and POST.

On the basis of the data, it is clear that section students use a higher number of evaluation language resources in the PRE (3,65%) in contrast to their peers in program (2,50%). However, after the implementation of R2L, there has been a change in the total appraisal density as it is BPS the ones who use a higher number of words expressing evaluation, namely 3,97% in contrast to 3,33% of BSS. If we look closer at Figure 29, BSS's percentages have shifted a bit because only engagement (1,90%) are above the established levels of the PRE. However, in bilingual program attitude (0,74% in PRE and 1,68% in POST), engagement (1,22% in PRE and 1,90% in POST) and graduation (0,53% in PRE and 0,72% in POST) have grown exponentially. Therefore, there is a common feature in both section and program given that within appraisal density, engagement is the aspect that has been increased in both groups. Nonetheless, in respect to attitude resources and graduation resources, bilingual program students use them much more frequently in the POST mediation. Thus, this constitutes one of the main

differences that we have found between BSS and BPS after working with *Reading to Learn* methodology.

Hitherto, all the data analysed with regards to RQ<sub>4</sub> is based on the average results obtained for both the PRE and POST mediation of our sample. In that sense, as we have previously done with the other research questions, to determine whether the observed differences of our sample remain somehow the same for the population, I applied statistical analysis. Notice that all the variables and T-test (*t-Test paired two samples for means*) have already been presented in Table 15 and Table 17, so in this case we will simply comment briefly on the main differences between BSS and BPS.

In the light of the above results, applying *Reading to Learn pedagogy* in both groups allows us to observe that this methodology does not trigger any improvement in the *number of words*: p-value of BSS [p-value (2,18172E-07) <  $\alpha$ ] and p-value in BPS [p-value (1,81979E-05) <  $\alpha$ ]; *number of clauses*: p-value in BSS [p-value (1,3537E-05) <  $\alpha$ ] and p-value in BPS [p-value (7,88E-03) <  $\alpha$ ]; *lexical density*: p-value in BSS [p-value (1,12E-04) <  $\alpha$ ] and p-value in BPS [p-value (1,12E-03) <  $\alpha$ ]; *clause/T-unit*: p-value in BSS [p-value (9,89E-03) <  $\alpha$ ] and p-value in BPS [p-value (5,86E-03) <  $\alpha$ ]. However, after employing R2L, there have been a significant change in both groups as regard: the *number of T-units*: p-value in BSS [p-value (0,319879) >  $\alpha$ ] and p-value in BPS [p-value (0,1861974) >  $\alpha$ ]; *lexical variation*: p-value in BSS [p-value (0,3513699) >  $\alpha$ ] and p-value in BPS [p-value (0,15594106) >  $\alpha$ ]; and *engagement resources*: p-value in BSS [p-value (0,2750684) >  $\alpha$ ] and p-value in BPS [p-value (0,429431117) <  $\alpha$ ].

Additionally, the unique effects of R2L on the written POST mediations which make a difference between BSS and BPS are *attitude resources*, *graduation resources* and *appraisal density*. In that sense, statistical analysis confirms that (a) the t-Test for *attitude resources* is different as in BSS the alternative hypothesis (H<sub>1</sub>) should be taken as correct, whereas in BPS the Null Hypothesis (H<sub>0</sub>) is expected to be correct given than [p-value  $(0.061872344) < \alpha$ ]; (b) once again, BPS complies with the Null hypothesis (H<sub>0</sub>) for *graduation resources* [p-value  $(0.375124781) > \alpha$ ] in stark contrast to BSS [p-value  $(2.70E-04) < \alpha$ ]; and (c) *appraisal density* is still higher in the POST of BPS [p-value  $(0.31191) < \alpha$ ], continuing with its respective Null Hypothesis (H<sub>0</sub>) in comparison to BSS in which the Null Hypothesis (H<sub>0</sub>) s is rejected because [p-value  $(0.013312) < \alpha$ ].

In a nutshell, all the results presented until here have been obtained from the application of CAF measures and statistical analysis onto the collected written mediations from both BSS and BPS. In that way, the data has been objectively examined so as to answer as felicitously as possible each of the 4 research questions posed at the beginning of the paper. Some remarks have been made at certain points of this section in which there is an explicit reference to further discussion. Indeed, that is the main aim of the subsequent section.

# 7. DISCUSSION AND PEDAGOGICAL IMPLICATIONS

#### 7.1 Discussion of the results

On the basis of the analysed data, this section will be devoted to discussing and examining the main findings and their consequent pedagogical implications in regard to teaching *mediation* in the secondary English classroom. To do so, the results of the discussion will be interpreted in relation to the assorted studies that have been conducted on this realm as well as on my own experience as a teacher implementing the current investigation in the classroom. Indeed, to ease the understanding of the reader, this section of the paper will follow the order of each research question.

First, let us study the main implications of the results on RQ<sub>1</sub>, — When working on the written mediation skill, are there any differences between bilingual section students, who have a high exposure to the English language, and bilingual program pupils, whose exposure is more reduced?—. In a general sense, in the light of the results presented earlier, bilingual section students (BSS) have a better outcome than bilingual program pupils (BPS) according to CAF measures when facing a *mediation* task. In other words, BSS' mediations are more fluent and complex than those by BPS. In fact, this can be perfectly observed in their accomplishment of a higher *number of words*, a higher *number of clauses* as well as a higher *number of clauses per T-units*. This result is in line with other studies such as the one carried out by González (2013:23) in which "bilingual section learners outperformed the bilingual program [...] students in the number of Words, T-units, Finite and Non Finite". Together with this, their *lexical variation* is also higher than their peers' in BP (74,46% and 67,72%, respectively), which is expected, given BSS's higher degree of exposure to English.

Therefore, taking this into consideration, it can be concluded that BSS outperformed BPS when they approached a mediation for the first time, according to fluency and complexity measures. Obviously, this does not entail that BPS do not show fluency or complexity. Simply, they do not perform as well as BSS with respect to *mediation* skill.

After providing a detailed discussion on the first approach to *mediation* within the secondary classroom in which no methodology was used, let us examine the major results after implementing *Reading to Learn* pedagogy both in BS and BP. Thence, the following

paragraphs will try to discuss the results answering to RQ2—Are there any effects of the implementation of the R2L pedagogy on bilingual section students' performance in the written mediation skill? —. As the data has shown, BSS considerably improved their lexical performances as both the *lexical density* and the *lexical variation* increased around 10% more from the PRE-mediation to the POST-mediation, where eight out of ten were unique content words. In stark contrast, grammatical complexity, including clauses and T-units, did not undergo any improvement at all. Indeed, this can be explained by the fact that I, as the teacher implementing this methodology, focused the attention of the session to the vocabulary domain of the environment and the natural world by posing students wh-questions so that they could reinforce their comprehension skills meanwhile they learnt the new vocabulary that they should write in the written mediation for each of the stages of the text genre. Another plausible argument to explain this lexical rise could be that writing the *mediation* right after we had been working with R2L may have helped the students to remember all the notions and concepts better. Nevertheless, if I had had more time to carry out the present investigation, it would have been ideal to do the written assignment in the next lesson so as to check the efficiency of working in such an exhaustive way with the text that they would employ to mediate.

What is more, it is necessary to state that at the beginning of the lesson, as presented in Section 5, I made students aware of the genre of the text (*argument type genre*) that they were going to use for mediating. That allowed them to organise the lexis in different stages so that they could know the main goal of each paragraph and its related vocabulary. In that sense, it proved useful to present students with the genre of the text before working with it in order that they could perceive better the structure not only of the text itself, but also the vocabulary found in each stage and phase. This may be another reason why BSS have increased their lexical performance in the POST-mediation. Notice that this effect did not take place in the case of grammatical complexity because I did not work deeply on clauses as I did with lexis.

Apart from the effect of R2L on lexis, a reference needs to be made to the growth of *engagement resources* in the POST-mediation, which has enlarged from 1,45% in the PRE-mediation up to 1,90% in the POST-mediation. This change in tendency from one mediation to another can be explained by the fact that in the R2L session I made students aware of acknowledging the source of the information (which is a type of *engagement*) that they needed to transmit to their friend. To do so, we worked very briefly on reported

speech so that they got used to using it in their written mediation. Hence, as expected, bilingual section students perfectly integrated it in their mediations.

Regarding RQ<sub>3</sub>,— Are there any effects of the implementation of the R2L pedagogy on bilingual program students' performance in the written mediation skill? as in the case of BSS, the main effect of R2L in the written mediation can be observed in an increase of students' lexical density as well as lexical variation as seven out of ten content words were unique. As previously alluded, the session emphasised vocabulary above any other language domain and as such it has been perfectly appreciated in students' POST written mediations. In this group, the appraisal density in the POSTmediation was much higher than in the PRE-mediation. Although it was clear that engagement resources were going to be more frequent given that during the instructional session, I drew students' attention to acknowledge the source of the information, there was no focus on attitude resources. In fact, as research shows an excess of attitude, particularly *affect*, is a typical characteristic of a novel writer whose level of the language is not so advanced (Llinares & Nashaat-Sobhy, 2022). This can perfectly be depicted with the POST mediation in which BPS have increased attitude resources. There might be manifold reasons to account for this aspect, although I would dare say that it was due to the lack of time. In other words, BPS might have been stressed because they didn't have so much time as for the PRE-mediation and thus, this mental blocking could have provoked students to go blank and they needed to resort to attitude so as to complete the word count requirement of the assignment. Table 14 below shows some examples extracted from the written mediations of BPS in the POST-mediation. Notice that for each student I have selected two sentences from the mediation to observe how they resorted to attitude, as presented in examples (1) to (3) below.

- (1) Student<sub>1</sub>: "In conclusion, if you **like** world, if you participate in the association, and you see very **happy**".
- (2) Student<sub>2</sub>: "The things are too **good**. / [...] his goals are too **good** if you want to try to safe the world".
- (3) Student<sub>3</sub>:

Introduction of the email: "I'm very **happy** to hear from you Max". Closing of the email: "I'm very **happy** to speak with you".

Finally, RQ<sub>4</sub> compared BSS and BPS— Are there any differences in the effects of the application of the R2L pedagogy across bilingual section and program groups?—. Generally speaking, there are not great differences between the results of BSS and BPS in regard to CAF measures, except for some aspects. Both groups outperformed in lexical density and lexical variation given that the main intention of R2L pedagogy was to work with the vocabulary that appeared in the Spanish text related to the environment and its surroundings. As to the manner in which it was achieved, it could be mentioned that when teaching the lesson, the board, which was the core of the methodology, was utilised to provide the learners with the Spanish vocabulary notes and its respective English counterpart. Consequently, this corroborates that the goal of the session, which was to acquire the necessary lexis to transmit the information while mediating, was accomplished. Accordingly, as expected, the *lexical variation* has significantly increased in both groups. However, it is of prime importance to state that the number of unique content words after implementing R2L has increased much more in BPS than in BSS, 12,6% and 9,81% respectively. So, this might explain that R2L pedagogy works particularly well for program pupils. Conversely, the lack of emphasis put on grammatical clauses and T-units is reflected in the results as there is no real effect of R2L on the written mediations in either of the groups. Nevertheless, had we had enough time to properly carry out this methodology in more than one session, the outcome of grammatical complexity could have surely been another, in a similar fashion to what has happened with lexical density and variation. Hence, Reading to Learn pedagogy, as it was implemented, has not been conclusive to spot any variability as regards grammatical issues in either of the two groups of students.

Apart from those aforementioned common traits, during the R2L pedagogy I emphasised the importance of giving acknowledgement to the author of the information so that they authorise the information by using reported speech and reporting verbs. This can explain the reason why both bilingual section and program students have increased their *engagement resources*, although the former have done it in a higher way. See below in instances (4) and (5), an example of reporting speech used by BSS (4) and BPS (5).

- (4) "It also says that they are pacifist, positive, open and egualitarian."
- (5) "The ad sais that they are a ecology association."

It seems, then, under equal circumstances, that BSS tend to implement faster the process of acknowledging information in contrast to BPS, who may need more time to cognitively process the information. This may be related to competence in the L2 or to more exposure and participation in this type of discourse for BSS in the English subject and in other subjects taught in English. The fact that BSS are exposed to more engaging and challenging interactional opportunities has also been observed in Llinares & Evnitskaya (2021).

Another relevant difference across groups is that attitude resources and graduation resources were significantly more frequent in BPS's POST-mediation texts than in those written by BSS. The lower the tokens of attitude and graduation language resources, the more felicitous to the genre. Indeed, these two types of appraisal language are more characteristics of informal and oral language rather than written. Therefore, in a formal written text, like the one they are using to mediate, students were not expected to introduce such a great amount of language of evaluation. This indicates that BS learners coped in a better way with the demands of this specific genre. In other words, a higher knowledge of English, or even higher academic competence in general, could have made it possible that they adapt better their written mediation to what is expected, and that BPS would have required more specific instruction on this.

For all these reasons, we can clearly state that albeit scanty dissimilarities in their performances, *Reading to Learn* methodology emerges as an inclusive methodology which "deepens students' understanding of the topic they are studying, accelerating the learning of all students, at the same time as it narrows the gap between higher and lower achievers" (Rose, 2011:10). That is to say, meanwhile bilingual section students prone their language abilities, bilingual program students improve their language skills and gain more vocabulary and confidence, although some areas of the language would have required further instruction.

#### 7.2 Pedagogical implications of R2L for the English classroom at secondary school

As earlier alluded, there has been a vast literature on the applications of R2L pedagogy, but none of them has applied it to the teaching of *mediation* within the secondary school classroom. In that sense, some remarkable aspects are worth noticing in regard to the pedagogical implications that R2L might have in the English classroom.

First of all, providing students with the necessary scaffolding is essential in order to succeed in this mediation skill. As data has confirmed, bilingual program students might need more guidance and monitoring with respect to authorial responsibility (engagement resources) as their performance is worse than that by the students in bilingual section. In that sense, not only should the teacher address this subject matter at the mere beginning of the session, but they should also work with students on the different manners to acknowledge someone else's words. Obviously, this requires more than one session, or, otherwise, bilingual program students might not fulfil the expected goal of the mediation task. Therefore, though *Reading to Learn* might not be the unique pedagogy for teaching reading and writing skills with the aim to improve students' literacy, what is clear is that it constitutes an approach that is above all inclusive and comprehensive with its surrounding. In stark contrast with other methodologies which are considered to marginalise and provide limited opportunities to the development of pupils' learning, in our case BSS and BPS, R2L represents a source of wealth for all sort of students as they are given "opportunities to participate fully and equally in a community" (Äli, Francesco & Aleksandar, 2021:3). Thence, this genre-based approach is suitable for the diversity found in the classroom and it allows teachers to focalise their efforts on the weakness and strength of their pupils. Indeed, as confirmed in the present investigation, such is the effect of R2L on students that those with a lower level of English increase in a higher percentage their lexical performance in the POST written mediation in comparison to bilingual section learners.

This latter remark comes in handy for the implementation of this method to *mediation* as research in R2L have demonstrated that "the weakest students showed significant progress during the implementation" (Becerra et al., 2020:238) of the pedagogy. This perfectly supports what has been stated hitherto. This is due to the fact that the whole learning process of R2L does not intend to provide students with equal standards and learning outcomes regardless of their circumstances and abilities, but rather it aims "to include students from all linguistic and social backgrounds in the education system successfully" (Whittaker & Acevedo, 2016:41). Consequently, to reach that objective, the teacher should plan before-hand the main aim of the lesson as it will have a direct result in students oral or written mediation as shown in this paper. If the teacher wants to work on lexis, grammar, or any other aspect, they should be conscious of it to properly organise the whole cycle of R2L. In that way, thanks to the didactic circle

proposed by Rose & Martin (2013), the teacher is able to keep track of pupils' progress and guide them towards a fully understanding of the text and its subsequent written outcome. Should the student hood have any hassle, the teacher, as a monitor figure, could become awareness of it before moving on to the following steps. Above all, this methodology is based on the principle of equity as it "recognizes that different students need different resources to achieve the same goals as their peers" (Latta, 2022).

## 8. CONCLUSION

The enactment of the new educational law in Spain (LOMLOE) has fostered a series of changes, among them the introduction of a new language skill. Mediation comes into play a crucial role for the syllabus design of the English subject from the next academic year 2022/2023 onwards. Therefore, such is the importance of this new ability that it requires some attention by researchers, scholars, and teachers.

Though the notion of mediation appears in the *Common European Framework of Reference for Languages* (CEFR), it has been largely downplayed until the *CEFR-Companion Volume* (2018) was published. In that way, LOMLOE has incorporated *mediation* so as to comply with the increasing interaction that takes place in our globalised era where people are more interconnected, and frontiers are becoming blurrier every day. This requires teachers to develop successful methodologies very quickly, to make sure this new skill is learnt properly, taking into account the specificities of the learners and groups (bilingual, non-bilingual, etc.)

Having said that, the main objective of the present paper was to provide a first approach to this skill given that no previous work has ever been done on this realm. So, with the aim of helping English teachers pave their way to facing this new language skill next year, this investigation has become a breakthrough for the time being. Not only has it considered the specificities of the bilingual project of the CAM, but it has also suggested the application of a successful pedagogy, *Reading to Learn*, and adapted it to this current skill. The study has demonstrated that bilingual section students tend to perform better when they write on their own the *mediation* skill in contrast to their bilingual program peers. Conversely, although both bilingual section and bilingual program improve if they are provided with scaffolding by the teacher through R2L, bilingual program pupils show a greater level of improvement regarding *lexical density* if we compared the PREmediation and POST-mediation. However, more explicit instruction would have been required for BPS in certain appraisal features (more *engagement* and less *attitude*), which did not seem so necessary in BSS.

It should also be explained that due to the limited amount of time to carry out this investigation, the study is cross-sectional (known as synchronous research) as the application and implementation of the paper was only done during my period of

internships. Nevertheless, it would have been enthralling to carry out a longitudinal study so that further conclusions could have been drawn. Together with this, the restricted amount of space of this investigation has left open some aspects for future research. On the one hand, it should have been of great interest as well as enriching for the present investigation to analyse the effect of the questions and feedback, done by the teacher in the R2L session, on students' performance in the written mediations. On the other hand, another fascinating area of study would have been to closely analyse the errors and mistakes that secondary school learners commit when mediating between their L1 and L2. Last but not least, this line of research can be further expanded by accounting for the importance of inclusion in the new language skill of the English classroom. That is to say, analysing how teachers can actually teach the *mediation* skill by taking into consideration the principles established in the Universal Design for Learning (UDL) so that all the participants carrying out the mere act of mediating have equal opportunities to succeed within the classroom.

Before ending up, I would not like to finish without saying that there is still much research that needs to be done on this domain of *mediation* and its performance in the secondary school, but what is clear is that the present paper can be taken as a pioneer. In the end, the manner in which this new language skill will evolve in the classroom as well as the coming challenges of the CAM bilingual project to *mediation* is a matter of time, field research and pedagogical practice. In that sense, although there might be many questions and doubts that are left open or that might be causing pain in teachers' minds, language teaching and learning is a lifelong path that never ends.

## 9. BIBLIOGRAPHY

- Äli, L.; Francesco.A; & Aleksandar, B. (2021). The Dilemma of Inclusive Education: Inclusion for Some or Inclusion for All. Frontiers in Psychology, 12:633066. doi: 10.3389/fpsyg.2021.633066.
- Banerjee, A.; & Chaudhury, S. (2010). Statistics without tears: Populations and samples. Industrial psychiatry journal, 19(1), 60–65. https://doi.org/10.4103/0972-6748.77642.
- Becerra, T.; Herazo, J.; García, P.; Sagre, A.; & Díaz, L. (2020). Using Reading to Learn for EFL students' reading of explanations. ELT Journal, 74 (3), 237-246, https://doi.org/10.1093/elt/ccz053.
- Bevans, R. (2020). An Introduction to T-Tests | Definitions, Formula and Examples. https://www.scribbr.com/statistics/t-test/.
- Comunidad de Madrid. (2022). Madrid Comunidad bilingüe. https://www.comunidad.madrid/servicios/educacion/madrid-comunidad-bilingue.
- Cores, E. (2020). Communicative mediation and identity for the development of European democratic values in the EFL classroom. Departamento de Filología Inglesa. Universidad de Huelva.
- Coste, D; & Cavalli, M. (2015). Education, mobility, otherness. The mediation functions of schools. Strasbourg: Council of Europe DGII Directorate General of Democracy, Language Policy Unit.
- Council of Europe (2001a). 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.
- Ferrero, B; & Peinado, B. (2021). 17 years without evaluating bilingualism in the Community of Madrid. El País. https://elpais.com/espana/madrid/2021-11-24/17-anos-sin-evaluar-el-bilinguismo.html.

- Galindo-Dominguez, H. (2021). Flipped Classroom in the Educational System: Trend or Effective Pedagogical Model Compared to Other Methodologies? Educational Technology & Society, 24(3), 44–60. https://www.jstor.org/stable/27032855.
- González, M.V. (2013). A comparative study of Bilingual Section, Bilingual Program and Non Bilingual learners's written production in the region of Madrid. [Master's Dissertation, Universidad Autónoma de Madrid]. https://libros.uam.es/tfm/catalog/download/379/707/529?inline=1.
- Halliday, M., & Matthiessen, C. (2014). An introduction to functional grammar. London: Routledge.
- Housen, A.; & Kuiken, F. (2009). Complexity, Accuracy, and Fluency in Second Language Acquisition. Oxford, Applied Linguistics 30 (4), 461–473.
- Latta, L. (2022). Equity in Education: Defining Equity, Equality, and Standardization. ImpactTulsa. https://www.impacttulsa.org/2019/11/26/impacttulsa-equity-in-education-defining-equity/.
- Llinares, A.; & Evnitskaya, N. (2021). Classroom Interaction in CLIL Programs: Offering Opportunities or Fostering Inequalities? TESOL Quarterly. 55 (2), 366-397.
- Llinares, A. & Nashaat-Sobhy, N. (2022). CLIL students' knowledge claims and personal views on a non-curricular topic: comparing high- and low-exposure groups. Paper presented at the AESLA conference, Las Palmas de Gran Canaria.
- Martin, J.R.; & Rose, D. (2003). Working with Discourse. Meaning Beyond the Clause. London: Continuum.
- Martin, J. & White, P. (2005). The Language of Evaluation: Appraisal in English. 10.1057/9780230511910.
- Michel, M. (2017). Complexity, Accuracy and Fluency (CAF). In Shawn Loewen & Masatoshi Sato. (2019). The Routledge Handbook of Instructed Second Language Acquisition. London: Routledge.
- North B. & Piccardo E. (2016). Developing illustrative descriptors of aspects of mediation for the CEFR. Education Policy Division, Council of Europe, Strasbourg.

- Rose, D. (2011). Beating educational inequality with an integrated reading pedagogy. In F. Christie and A. Simpson (eds.) (2010). Literacy and Social Responsibility: Multiple Perspectives. London: Equinox.
- Rose, D. (2015). Genre, knowledge and pedagogy in the 'Sydney school'. In Artemeva, N & Freedman, A. (2015). Trends and traditions in genre studies. Alberta, Canada: Inkshed.
- Rose, D.; & Acevedo, C. (2017). Learning to write, Reading to Learn: background and development of genre-based literacy improvement projects in Australia. Lenguaje y textos, 46, 7-18. http://doi.org/10.4995/lyt.2017.8688.
- Rose, D.; & Martin, J.R. (2013). Intervening in contexts of schooling. In J Flowerdew [ed.] Discourse In Context: Contemporary Applied Linguistics, 3, 447-475.
- Shiu-kee Shum, M; Pui Tai, C.; & Dan Shi. (2018). Using 'Reading to Learn' (R2L) pedagogy to teach discussion genre to non-Chinese-speaking students in Hong Kong, International Journal of Bilingual Education and Bilingualism, 21 (2), 237-247, DOI: 10.1080/13670050.2016.1159653.
- Sinharay, S. (2010). An Overview of Statistics in Education. In: Peterson, P., et al., Eds., International Encyclopedia of Education, 3rd Edition, Elsevier Ltd., Amsterdam, 1 (11). https://doi.org/10.1016/B978-0-08-044894-7.01719-X.
- The Appraisal website. (2022). The language of Attitude, Arguability, and Interpersonal Positioning.

  http://www.grammatics.com/appraisal/appraisalguide/framed/frame.htm.
- Thompson, G. (2014). Introducing Functional Grammar. London: Routledge.
- Thompson, G., Bowcher, W., Fontaine, L., & Schönthal, D. (2019). The Cambridge Handbook of Systemic Functional Linguistics (Cambridge Handbooks in Language and Linguistics). Cambridge: Cambridge University Press. doi:10.1017/9781316337936.
- White, P. (2011). Appraisal. In Zienkowski, Jan, Jan-Ola Ostman & Jef Verschueren (eds.) Handbook of Pragmatics Highlights (HoPH). Discursive Pragmatics. 8, 14-36. Amsterdam: John Benjamins.

- Whittaker, R.; & Acevedo, C. (2016). Working on Literacy in CLIL/Bilingual Contexts:

  Reading to Learn and Teacher Development. Estudios sobre educación, 31, 3755.
- Whittaker, R. (2018). Reading to Learn in CLIL subjects: working with content-language. CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education, 1 (1), 19-27. DOI: https://doi.org/10.5565/rev/clil.4.

## 10. APPENDICES

## 10.1. Appendix 1: Reading text for mediation

#### WRITTEN MEDIATION IN ENGLISH

Write an email (about 150-190 words) following the instructions given.

Your English friend Max, who is 23 years old, is going to live in Madrid for several months. He really cares for the environment and the sustainability of the planet. Therefore, he would like to join an association when he arrives here. He has found the information below interesting, but he doesn't understand Spanish well.

Write an email to Max in English and give him the most relevant information about the club and how to become a member.

### ASOCIACIÓN AMIGOS DE LA TIERRA

### ¿Quiénes somos?

Amigos de la Tierra: somos una asociación ecologista sin ánimo de lucro con la misión de fomentar un cambio local y global hacia una sociedad respetuosa con el medio ambiente, justa y solidaria. Somos un grupo de personas que defendemos la justicia social y ambiental; creemos firmemente que el centro de las políticas han de ser las personas y La Tierra. Así, denunciamos y presionamos a empresas y administraciones, a la vez que proponemos diversas soluciones para lograr un mundo más justo.



Nuestros grupos locales participan activamente en campañas para involucrar a la ciudadanía y dar a conocer las alternativas con las que contamos. La participación de todas las personas y grupos que conforman Amigos de la Tierra es uno de los principios básicos.

Nuestra misión es fomentar un cambio local y global hacia una sociedad respetuosa con el medio ambiente, justa y solidaria. Además, somos una asociación ecologista que, además, se declara: cercana a las personas; constructiva y positiva; abierta y dialogante; pacifista y no violenta; democrática y participativa; independiente e igualitaria.

Nuestras campañas son muy variadas, entre ellas, poner la energía renovable en manos de las comunidades y de la ciudadanía, restando así poder a la industria de los combustibles fósiles; reducir el consumo de plástico en todos los ámbitos de la sociedad; preservar los ecosistemas y la biodiversidad de los insectos que están amenazados por los plaguicidas y la pérdida de hábitat, etc.

## ¿Piensas igual? ¡Hazte socio!

Pasa a formar parte de la Asociación Amigos de la Tierra y participar en nuestros proyectos e iniciativas. Solamente tienes que introducir tu número de identidad, completar tus datos personales y realizar el pago con tarjeta. Ser socio supone una cuota anual de 60€ al año, o de 25€ al año en el caso de menores de 25 años, jubilado o desempleado. Como socio recibirás información periódica a tu correo sobre los proyectos que estamos desarrollando y podrás participar en nuestros espacios de opinión y debate, entre otras muchas ventajas.

Adaptado de Amigos de la Tierra (2022)

## 10.2. Appendix 2: Examples of written mediations

**Attention**: the reader must be aware that the symbols and marks that you will find in the different mediations are there for a reason. After students wrote their mediations, for the collection of data of this study, I design a key so as to extract all the data in an easier way. So, I hope that those symbols do not pose any kind of hassle to the reader. Thanks in advance.

## Participant A: 4°A BILINGUAL SECTION

Hi Max!

I'm writing you in response to your emous asking for information about the "Associación Amiges de la Tierra", in order to foin)

them ofter your arrival in Madrial. I ve been searching for information about it, and these are the most neterant point I thought you would like to know.

The association you have found fig an ecologist association unose main objective [s] to fight] for people's and environmented rights by Creating a more respectful and fair society with the environment. They declare participation of attrens [is] key in their association. They declare themselves an open, pacifist, democratic, independent and ignation organization. Some of their existing ampaines are not only establishing renewable energy sources degether with reducing the extreme plastic consume, but also preserving ecosystems and bicdiversity in order to end up with the endangering of species.

In case this information (suits) you, you could froin) them by introducing your identity number as well as your personal information, and paying 25 & per year by eard, according to your age, in order to receive information about their prejects. I hope it is been helpful? It im Tooking forward to hearing from you I can wart to meet you in Madridi.

## Participant B: 4°A BILINGUAL SECTION

Hello Max,
[I'm [writing] you to [show) you or great plan I [have] in mind regarding your start in Madrid] [I [know) have much you [care] for the environment and that you'd [love] to [oin] an association that [fights] in order to [build] a more sustainable world.]
[I've [spent] a couple of days (looking] for the best Madrid's ecological associations! (I came) across "Cobold's friends association" and flought it a be perfect for you [s) to (achieve) a fair world.]
They are mostly known for putting under pressure administrations and companies to frij to make them change for the better chat's more, they also organise non-violent demonstration-like campains to show civilans what they're fighting for
To sum up, not only are they [offering] a wide range of campaigns but also it [soll affordable for almost everyone to [soll) this association.]
(Dest) to [help] the planet.]  Dest wishes

# Participant C: 4°B BILINGUAL SECTION PRE-MEDIATION

Dear Max, (It has [been] freat to [Know] that you [are] so interested you have schosen (is) great for it.), Amigos de la Tierra (is) en association that improve the ways in which we take core of our plenet This apociations (kas) as an objective to (marcare) the averages in order to provoke a social change towards a more on the need of the people and the plenet of the plenet on the ple that [eve] on it.) Amigo de la liera (hou) many compaines to limprove the relationhip with the citizen and (forment) their implication) [They (corrider) themselves an open-minded politions to certain problem. Solutions that they screeting in problem. Solutions that they screeting in [To see part of the acrociation the only thing that is sneeded [15] your identity number, your personal data and [1 [hope] that you (And) this information interesting



# Participant C: 4°B BILINGUAL SECTION POST-MEDIATION

## WRITTEN MEDIATION IN ENGLISH

		Mark	Į
-	Write an email (about 150-190 words) following the instructions given.		

Your English friend Max, who is 23 years old, is going to live in Madrid for several months. He really cares for the environment and the sustainability of the planet. Therefore, he would like to join an association when he arrives here. He has found the information below interesting, but he doesn't understand Spanish well.

Write an email to Max in English and give him the most relevant information about the club and how to become a member.

Mex. to hearing from you. join my , non- profit now but den't (Rosges) 82

# Participant D: 4°C BILINGUAL PROGRAM PRE-MEDIATION

Hello Max. How are you doing? [ [saw] the e-mail that you sent me and I'm gonnatery to explain to you a little bit about the association) They (ase an ecologist association with no will of fearning) money with their work) They defend social and natural justice, and they fare very concerned about In Ilvenoing (people) about ecology They (describe) themselves as close to people) constructive, positive, open, etc.) Tone of their goals (is) also protecting insects and their ecosistems, that are being attacked Now, how can you become a nember of this association Well, because you are under 25 years old, you will have to pay 25 dollars a year with your credict card, and (give) them your identity number and more personal information. You will read be) periodic information about the projects and more things if you get in. That (is) basicly everything you need to know, but if you have lany more questions den't hesitateland (ark) me. 19 [I hope goo ( Sind) an organitation that gov ( like ) soon.] good) luck 1

# Participant D: 4°C BILINGUAL PROGRAM POST-MEDIATION

HI Max,

How are you doing (1/m writing) to you because you (wound) to know what the information about the association Amages de la tierral says) because you don't understand Spanish (well.).

(Amigos) de la Tierra (is, an environmental association) that (wants) to promote a change to a respectful society with the environment (1/15) groups (participate) in campaigns to (involve) citizenship to (make public the main alternatives that the association has all thas (variated campaigns, like [puting renowable energies in hands of the communities.)

personal data [ If you have ) any doubt, just lask ) mc. ].

payment should be by card TAlso you have to fintroduce your 10 and complete

Best wishes

## Participant E: 4°D BILINGUAL PROGRAM

I'm [writing] to you because you [want] to know what foothe information about the association through de la tierral (says) am (going] to [translate] you the most important things and how to [become] a member.]

[Amigor de la tierral (is an association) that wants to [make] a local and global change to a respectful society with the environment.]

[It's make) by a group of people who [defends] the social and ambiental justicity I heir comparigns are (variated) and one of them (is parting) renowable sources in the hands of the comunities and reducing the consume of the plastic.]

[To take point of the association through de la Tierra and participation their projects, you have to (introduce) your identity number (complete) some personal information and pay with credit card [Be] a member some personal information and pay with credit card [Be] a member that the association is making by e-mail, and participated in them.]

[If you (over interested) i wish you "I [foin] to the (association and if you've) any doubts about the information, just write) me.]

## Participant F: 4°D BILINGUAL PROGRAM

Hello Hex,

[Im] very happy for your meving to Medid, I reed the information of "emigos de le therre" and Im going to resume the flexition you.

The text talk about the characteristics of this ecologic asociation, for example
this group of readle defend the social justice and environmental. In
[one of the Ahards that this group of reasons (do] [is] [report] companys; also they participated in more thinks like (fight) for the revewable energy or reduce the plastic consume.]

[If you want to be a participant of this moment do you have to (Grounde) your identify humber complete your personal intermedian and provide 25 to every year.)

[See]you.]

## 10.3. Appendix 3: Lesson plans

**Topic:** Environment

## LESSON PLAN (1)

Background Information		
Course/Subject: English language	Class/level: 4° ESO B (bilingual section)	
Number of students / Diverse needs: 29	<b>Date:</b> 30/03/2022 <b>Time/Length:</b> 50 min.	
<b>Unit:</b> session for implementing the TFM	Lesson #: 1	

**Lesson Information** 

Key competences: CLC, L2L, SCC, SIE

	, , , , , , , , , , , , , , , , , , ,		
Lesson aim: By the end of the lesson students will be able to write an email to a friend based of a Spanish advertisement.  Specific content/skills focus:	• To understand and recognise the main stages of		
Structures and functions		information; elaborating the meanings of s); and paraphrasing a text.	
Vocabulary		taining to the semantic field of ch as fossil fuels, ecosystems, green l emissions, etc.	
	Speaking and interaction	Speaking for efficient communication.	
	Listening	Listening for general understanding of a text.	
Skills	Reading	Detailed reading of a short passage looking for key information in each paragraph.	
	Writing	Note taking, and joint rewriting of a text.	
	Mediation	Mediating a text to get a friend to join an association and extraposing one genre onto another.	
(Inter)cultural content	(Inter)cultural content		
Cross-curricular content	This content is shared with the biology subject in which students learn the greenhouse effect, contamination of oceans, emissions of carbon dioxide, etc.		

**Resources:** blackboard, chalk, reading for the session, handout with the instructions, and PPT with the adaptation of the ad genre into the email genre.

How does this lesson fit in with the previous and next lessons?						
Last session	Next session					
	This session is aimed to implement					
	the methodology Reading to Learn	language assistant on				
'Looking after yourself'.	(R2L).	speaking.				

## **Anticipated problems & solutions:**

- Students might not be interested in practising the reading skill. Thus, the teacher must encourage them by highlighting the importance of this subject matter in our everyday life.
- Students might not be engaged in reading a text related to the environment. Therefore, the teacher must make them conscious about the necessity to know about this issue in a world-wide scale to foster critical thinking in new generations.
- Some students might not have done the previous work at home (reading and summarising the Spanish text). Consequently, the teacher must make sure that although they haven't read it, they pay attention to other classmates' summary.

	Lesson development			
Stage Timing		Teacher's activity	Teacher's activity Students' activity	
	1 min	The teacher welcomes students and asks them 'how are they feeling', 'how is the week going', etc. meanwhile the teacher distributes the reading worksheet that they will be using during the whole lesson.	Students answer the questions posed by the teacher.  Students are given the worksheet for this lesson.	T-S S-T
Warm-up	1 min	The teacher reads the Spanish text aloud.	Students listen to the teacher.	T-S
	1 min	The teacher tells students the genre of the text (everyday life genre: ad) as well as its stages (context-arguments and thesis).	Students pay attention to the blackboard as well as to the explanation of the teacher.	T-S
	2 min	The teacher asks students to read two of the summaries they have made (flipped classroom).	Students are intended to participate by reading their summaries.	T-S S-T
Main activity	15 min	Detailed reading of each paragraph of the text going sentence by sentence; asking students for key information; and highlighting it. The teacher writes it in the board both in Spanish and English.	Students are aimed at answering the teacher. At the same time, students have to write down the meaning of the highlighted words and expressions.	T-S S-T
	5 min	The teacher asks for five volunteers who will rewrite each stage in the blackboard.	Five students write a sentence for each different stage of this	T-S

			At the same time, the teacher observes students to guide them so as to raise language level above student's proficiency.	everyday life genre with the new vocabulary and expressions on the board.	S-T
4		4 min	The teacher explains to students the new genre in which they will have to write the mediation (email) and how they have to introduce each stage of the ad in it.	Students pay attention to the teacher so that they are able to reorganise the stages of one genre to the other one.	
		20 min	The teacher hands in the instruction for the email and supervises that everything is under control.	Students write again the mediation after working on the Spanish text.	S-S
	Wrap-up	1 min	The teacher gives students a 'emoji exit ticket' to check the efficiency of the session. Finally, the teacher says goodbye to the pupils.	Students fill in the 'emoji exit ticket', listen to the teacher, and the lesson finishes.	T-S S-T
Ī	Total	50 min			

#### **Assessment:**

Of students	Of session	Of teacher
The teacher collects the emails (mediation) that students have written for 29 minutes so as to check their performance in this skill.	students during the lesson by observing their performance	reflecting on how the lesson plan was applied; if there were any problems, as well as any aspect that could be improved for

Adaptations for differentiated learning & early/late finishers: for those who are early finishers, they can revise their writing. However, those who are late finishers can receive some extra time from the following class so that they are able to finish the task.

**Homework/Further work:** there is no homework or further work.

### **Notes:**

• Students will have worked on the Spanish text before this session. This is due to the fact that we don't have enough time during the lesson. Therefore, the teacher will apply the methodology of flipped classroom where students are intended to have read the text and have written a short summary (around 3 lines) in Spanish. In that way, the teacher will be able to cope better with time and students will be able to have around 20 minutes to write the email.

## APPENDIX 1: EMOJI EXIT TICKET

EMOJI EXIT TICKET					
Circle the Emoji(s) that reflects how you got on today in the lesson. Explain your reasons why					
©	65	•••	3		<b>©</b>
(**)	( <u></u> )	(F)			
~ ·	30			(xx)	60
I chose this Emoji because					

## LESSON PLAN (2)

Background Information		
Course/Subject: English language Class/level: 4° ESO C (bilingual program)		OC (bilingual program)
Number of students / Diverse needs: 29	<b>Date:</b> 31/03/2022	Time/Length: 50 min.
Unit: session for implementing the TFM	Lesson #: 1	

	Lesson Information		
Topic: Environment	Key competences: CLC, L2L, SCC, SIE		
Lesson aim: By the end of the lesson students will be able to write an email to a friend based on a Spanish advertisement.  Specific content/skills focus:	To understand and recognise the main stages of		
specific content/skins focus.			
	Highlighting key information; elaborating the meanings of words (definitions); and paraphrasing a text.		
Vocabulary	Vocabulary pertaining to the semantic field of environment such as fossil fuels, ecosystems, green energy, industrial emissions, etc.		

	Speaking and interaction	Speaking for efficient communication.
	Listening	Listening for general understanding of a text.
Skills	Reading	Detailed reading of a short passage looking for key information in each paragraph.
	Writing	Note taking, and joint rewriting of a text.
	Mediation Mediating a text to get a friend to jo an association and extraposing of genre onto another.	
(Inter)cultural content		
Cross-curricular content	This content is shared with the biology subject in which students learn the <i>greenhouse effect</i> , <i>contamination of oceans</i> , <i>emissions of carbon dioxide</i> , <i>etc.</i>	

**Resources:** blackboard, chalk, reading for the session, handout with the instructions, and PPT with the adaptation of the ad genre into the email genre.

### How does this lesson fit in with the previous and next lessons?

Last session	This session	Next session					
	This session is aimed to implement the methodology Reading to Learn (R2L).	· ·					

### **Anticipated problems & solutions:**

- Students might not be interested in practising the reading skill. Thus, the teacher must encourage them by highlighting the importance of this subject matter in our everyday life.
- Students might not be engaged in reading a text related to the environment. Therefore, the teacher must make them conscious about the necessity to know about this issue in a world-wide scale to foster critical thinking in new generations.
- Some students might not have done the previous work at home (reading and summarising the Spanish text). Consequently, the teacher must make sure that although they haven't read it, they pay attention to other classmates' summary.

		Lesson developm	nent	
Stage	Timing	Teacher's activity	Students' activity	Interaction
	1 min	The teacher welcomes students and asks them 'how are they feeling', 'how is the week going', etc. meanwhile the teacher distributes the reading worksheet that they will be using during the whole lesson.	Students answer the questions posed by the teacher. Students are given the worksheet for this lesson.	T-S S-T

	1 min	The teacher reads the Spanish text aloud.	Students listen to the teacher.	T-S
Warm-up	1 min	The teacher tells students the genre of the text (everyday life genre: ad) as well as its stages (context-arguments and thesis).	Students pay attention to the blackboard as well as to the explanation of the teacher.	T-S
	2 min	The teacher asks students to read two of the summaries they have made (flipped classroom).	Students are intended to participate by reading their summaries.	T-S S-T
	15 min	Detailed reading of each paragraph of the text going sentence by sentence; asking students for key information; and highlighting it. The teacher writes it in the board both in Spanish and English.	Students are aimed at answering the teacher. At the same time, students have to write down the meaning of the highlighted words and expressions.	T-S S-T
Main activity	5 min	The teacher asks for five volunteers who will rewrite each stage in the blackboard. At the same time, the teacher observes students to guide them so as to raise language level above student's proficiency.	Five students write a sentence for each different stage of this everyday life genre with the new vocabulary and expressions on the board.	T-S S-T
	4 min	The teacher explains to students the new genre in which they will have to write the mediation (email) and how they have to introduce each stage of the ad in it.	Students pay attention to the teacher so that they are able to reorganise the stages of one genre to the other one.	
	20 min	The teacher hands in the instruction for the email and supervises that everything is under control.	Students write again the mediation after working on the Spanish text.	S-S
Wrap-up	1 min	The teacher gives students a 'emoji exit ticket' to check the efficiency of the session. Finally, the teacher says goodbye to the pupils.	Students fill in the 'emoji exit ticket', listen to the teacher, and the lesson finishes.	T-S S-T
Total	50 min			

## **Assessment:**

Of students	Of session	Of teacher					
emails (mediation) that	The teacher has been guiding students during the lesson by observing their performance and their language	reflecting on how the					

minutes so as to check their performance in this skill.		could be improved for future lessons. It is also worth noticing timemanagement and students' motivation, among others.					
Adaptations for differentiated	l learning & early/late	Homev	work/Further work: there is				
finishers: for those who are ea	arly finishers, they can	no hom	nework or further work.				
revise their writing. However	r, those who are late						
finishers can receive some	extra time from the						
following class so that they are	able to finish the task.						

### **Notes:**

• Students will have worked on the Spanish text before this session. This is due to the fact that we don't have enough time during the lesson. Therefore, the teacher will apply the methodology of flipped classroom where students are intended to have read the text and have written a short summary (around 3 lines) in Spanish. In that way, the teacher will be able to cope better with time and students will be able to have around 20 minutes to write the email.

## 10.4. Appendix 4: Sample visual representation of the board in R2L

GENRE: ad	vertisement -sort of an argument- (arguin	g for a change in the world- get the read	er to join an association)
STAGES	SPANISH NOTES	ENGLISH NOTES	JOINT REWRITING (my version)
Context	<ul> <li>Asociación ecologista – sin ánimo de lucro.</li> <li>Misión: (a) sociedad respetuosa con medio</li> </ul>	<ul> <li>Non-profitmaking environmental association/group</li> </ul>	Amigos de la Tierra is a non-profitmaking environmental association whose mission is to
Asociación ecologista (definición): respetuosa; justicia y lograr un mundo más justo	<ul> <li>ambiente, (b) justa y (c) solidaria.</li> <li>Defender justicia social; y denunciar y presionar a empresas – lograr un mundo más justo.</li> </ul>	<ul> <li>Mission/goal: society respectful of the environment, fair and caring.</li> <li>Defend social justice; denounce and put pressure on companies and administrations – achieve a fairer world.</li> </ul>	promote a society that is respectful of the environment so as to achieve a fairer world.
Argument 1	<ul> <li>Participación activa en campañas: (a) involucrar a ciudadanía y (b) dar a conocer</li> </ul>	<ul> <li>Active participation/engagement in campaigns: (a) involve the citizenship and</li> </ul>	Local groups have an active participation in campaigns so as to involve the citizenship and
Importancia y participación de todas las personas	<ul> <li>alternativas.</li> <li>Participan todas las personas – principio básico.</li> </ul>	<ul> <li>(b) make public the different alternatives.</li> <li>Participation of all people – basic principle.</li> </ul>	to make public different alternatives.
Argument 2	Misión: fomentar un cambio (a) local y (b) global.	<ul> <li>Mission: promote a (a) local and (b) global change towards society.</li> </ul>	The association is close to people, positive, open, pacifist, participatory, and egalitarian.
Valores de la asociación	<ul> <li>Cercana, positiva, abierta, pacifista, participativa, igualitaria.</li> </ul>	<ul> <li>Close to people, positive, open, pacifist, participatory, egalitarian.</li> </ul>	open, pacinst, participatory, and egantarian.
Argument 3	<ul> <li>Campañas, entre otras: (a) energías renovables, (b) restar poder a la industria</li> </ul>	<ul> <li>Campaigns, among them: (a) renewable energies, (b) diminish the power of fossil</li> </ul>	There are many campaigns, among others: favour renewable energies; diminish the power
Principales campañas de la asociación	combustible fósil; (c) reducir consumo de plástico; (d) preservar ecosistemas y biodiversidad -insectos amenazados por plaguicidas y pérdida de hábitat.	fuel companies; (c) reduce/lessen/decrease the consumption of plastic; (d) preserve the ecosystems and the biodiversity of insects threatened by (i) pesticides and (ii) loss of habitat.	of fossil fuel companies; reduce the consumption of plastic; and preserve the ecosystems and the biodiversity of insects.
Thesis	Formar parte: (a) número de identidad, (b) datos personales, (c) pago con tarjeta.	<ul> <li>Join! - imperative in source (a) ID number;</li> <li>(b) personal information/data; (c) payment</li> </ul>	To join the association, you need to complete some personal information and make a
Cómo ser socio y qué pagar para recoger fondos.	<ul> <li>(a) Cuota anual 60€; (b) 25€ si -menor de 25, jubilado o desempleado.</li> <li>Recibir información periódica.</li> </ul>	<ul> <li>with card.</li> <li>(a) annual fee 60€; (b) 25€ if- younger than 25, retired or unemployed.</li> <li>Receive regular information</li> </ul>	payment of 25€ because you are younger than 25.

# 10.5. Appendix 5: Photos of the implementation of *Reading to Learn* process at the high school



Image 1. Teaching Reading to Learn pedagogy to bilingual section students.



Image 2. Writing in the board as stated by the R2L pedagogy.



Image 3. Bilingual section students rewriting the text on the board.



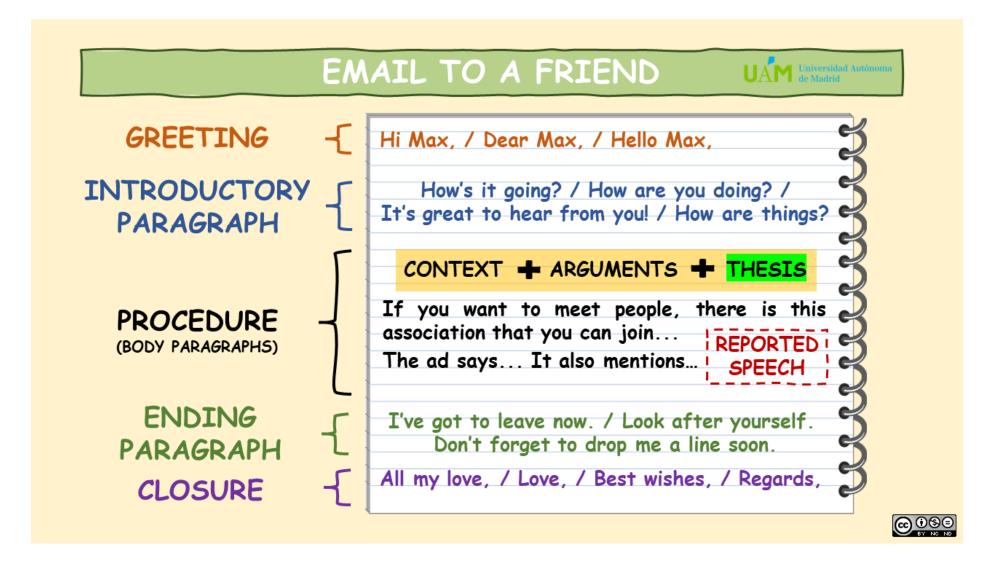
 $\textbf{\textit{Image 4. Genre awareness (new step in the R2L pedagogy for mediation)}.$ 



*Image 5.* Bilingual program students rewriting the text on the board.



Image 6. Visual representation of the blackboard after working with students on R2L.



# 10.7. Appendix 7: Samples of notes-taking done by student in the reading texts that they have used during R2L session

	Participant A	
	ASOCIACIÓN AMIGOS DE LA TIERRA	
	¿Quiénes somos?	
	Amigos de la Tierra: somos una asociación ecologista sin ánimo de lucro	
	con la misión de fomentar un cambio local y global hacia una sociedad  Society ve perfue A respetuosa con el medio ambiente, justa y solidaria. Somos un grupo de	
	personas que defendemos la justicia social y ambiental; creemos	
	firmemente que el centro de las políticas han de ser las personas y La Tierra.  Así, denunciamos y presionamos a empresas y administraciones, a la vez	
	que proponemos diversas soluciones para lograr un mundo más justo.	
Agument d	Nuestros grupos locales participan activamente en campañas para involucrar a la ciudadanía y dar a male public allembros conocer las alternativas con las que contamos. La participación de todas las personas y grupos que conforman Amigos de la Tierra es uno de los principios básicos.	
(	Nuestra misión es fomentar un cambio local y global hacia una sociedad respetuosa con el medio ambiente,	
Argunet )	justa y solidaria. Además, somos una asociación ecologista que, además, se declara: cercana a las personas;  per per per per la constructiva y positiva; abierta y dialogante; pacifista y no violenta; democrática y participativa;	
2 (	independiente e igualitaria.  ega l: tarkn	
1	Nuestras campañas son muy variadas, entre ellas, poner la energía renovable en manos de las comunidades	
Agoment	y de la ciudadanía, restando así poder a la industria de los combustibles fósiles; reducir el consumo de plástico en todos los ámbitos de la sociedad; preservar los ecosistemas y la biodiversidad de los insectos	
3	que están amenazados por los plaguicidas y la pérdida de hábitat, etc.	
	¿Piensas igual? ¡Hazte socio!	
1	Pasa a formar parte de la Asociación Amigos de la Tierra y participar en nuestros proyectos e iniciativas.	
Thesi	Solamente tienes que introducir tu número de identidad, completar tus datos personales y realizadel pago (Cedidade de Completar Ser socio supone una cuota anual de 60€ al año, o de 25€ al año en el caso de menores de 25	2
(100)	años, jubilado o desempleado. Como socio recibirás información periódica a tu correo sobre los proyectos	
	que estamos desarrollando y podrás participar en nuestros espacios de opinión y debate, entre otras	
	muchas ventajas.	
	Adaptado de Amigos de la Tierra (2022)  1 —P JOINT RE WRITING 4—	
	context   Argument 1   Argument 2   Argument 3   Thesis	
Hrane	whomenteland They pirticipale It's open, Their company mode to join the	C #
non-profit that deneen	making a wocidon in Compaining involving positive pocific prevening any tems date and py and order one against force and py one entorprise showing adjoint of the second one against force and one against force and one of the second of the se	المار الماركة

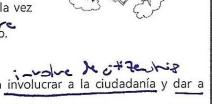
Thesis.	energias revoir-inde identidad, blez consomo de plas datos personales tico presencir da frema paso en largeta	ID runnber personel doda, pery with credicil	Participant B
Argument 2 Aropiment 3 Thesis.	energhas revoictibles.  Aico preservour ecosistement	Fessel fuels personee dosa, present dosa, preserve the eart, eart, eart, eart,	
Argumend 2	positiva ebsierta participativa, pourtista iguodi todoria	positive  spe  positive  positive  positive  egoulitatoria	
Argument 2	participar campañas.	partia pate cempuign inolue make atteens public the main	
Context	Acosiación ealagrec. Sin animo de lucro misión cambio globole y locol. denunciar y prationer.	environmental ecologist how prostit moding society respective of pressure on.	1
Stagas		ENGLISH	SOINT

### ASOCIACIÓN AMIGOS DE LA TIERRA

#### ¿Quiénes somos?

Emisonetal Tros & Solt rewing

Amigos de la Tierra: somos una asociación ecologista sin ánimo de lucro con la misión de fomentar un cambio local y global hacia una sociedad respetuosa con el medio ambiente, justa y solidaria. Somos un grupo de personas que defendemos la justicia social y ambiental; creemos firmemente que el centro de las políticas han de ser las personas y La Tierra. Así, denunciamos y presionamos a empresas y administraciones, a la vez que proponemos diversas soluciones para lograr un mundo más justo.



Nuestros grupos locales participan activamente en campañas para involucrar a la ciudadanía y dar a conocer las alternativas con las que contamos. La participación de todas las personas y grupos que conforman Amigos de la Tierra es uno de los principios básicos.

Nuestra misión es fomentar un cambio local y global hacia una sociedad respetuosa con el medio ambiente, justa y solidaria. Además, somos una asociación ecologista que, además, se declara: cercana a las personas; constructiva y positiva; abierta y dialogante; pacifista y no violenta; democrática y participativa; independiente e igualitaria.

Nuestras campañas son muy variadas, entre ellas, poner la energía renovable en manos de las comunidades y de la ciudadanía, restando así poder a la industria de los combustibles fósiles; reducir el consumo de plástico en todos los ámbitos de la sociedad; preservar los ecosistemas y la biodiversidad de los insectos que están amenazados por los plaguicidas y la pérdida de hábitat, etc.

### ¿Piensas igual? ¡Hazte socio!

Pasa a formar parte de la Asociación Amigos de la Tierra y participar en nuestros proyectos e iniciativas. Solamente tienes que introducir tu número de identidad, completar tus datos personales y realizar el pago con tarjeta. Ser socio supone una cuota anual de 60€ al año, o de 25€ al año en el caso de menores de 25 años, jubilado o desempleado. Como socio recibirás información periódica a tu correo sobre los proyectos que estamos desarrollando y podrás participar en nuestros espacios de opinión y debate, entre otras muchas ventajas.

Adaptado de Amigos de la Tierra (2022)

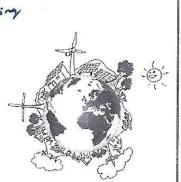
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## **ASOCIACIÓN AMIGOS DE LA TIERRA**

### ¿Quiénes somos?

Amigos de la Tierra: somos una asociación ecologista sin ánimo de lucro con la misión de fomentar un cambio local y global hacia una sociedad respectuosa con el medio ambiente, justa y solidaria. Somos un grupo de personas que defendemos la justicia social y ambiental; creemos firmemente que el centro de las políticas han de ser las personas y La Tierra.

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Adaptado de Amigos de la Tierra (2022)

## 10.8. Appendix 8: Results of 4°A (bilingual section) on Excel

	PRE-MEDIATION																
		FLUENCY					T IXL IVII	DIMITIO	COMPL	EXITY							
				LEXICAL I	DENSITY	LEXICAL V	ARIATION		APPRAISAL DENSITY								
								ATTIT	TUDE	ENGAG	EMENT	GRADU	JATION	ТОТ	'AL	CLA/T-UNIT	
	Nº W	Nº C	N° T-UNITS	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	N°	
Participant 1	171	28	9	80	46,78	67	83,75	2	1,17	3	1,75	0	0	5	2,92	3,11	
Participant 2	152	28	10	84	55,26	70	83,33	1	0,66	4	2,63	3	1,97	8	5,26	2,80	
Participant 3	117	20	8	50	42,74	48	96,00	0	0,00	2	1,71	0	0,00	2	1,71	2,50	
Participant 4	227	37	14	102	44,93	81	79,41	2	0,88	2	0,88	2	0,88	6	2,64	2,64	
Participant 5	189	31	9	85	44,97	68	80,00	1	0,53	4	2,12	1	0,53	6	3,17	3,44	
Participant 6	163	29	9	77	47,24	57	74,03	2	1,23	3	1,84	2	1,23	7	4,29	3,22	
Participant 7	163	25	7	78	47,85	63	80,77	0	0,00	1	0,61	1	0,61	2	1,23	3,57	
Participant 8	166	24	6	80	48,19	56	70,00	1	0,60	2	1,20	1	0,60	4	2,41	4,00	
Participant 9	144	29	9	82	56,94	68	82,93	0	0,00	2	1,39	0	0,00	2	1,39	3,22	
Participant 10	182	32	11	80	43,96	65	81,25	2	1,10	5	2,75	1	0,55	8	4,40	2,91	
Participant 11	168	22	9	74	44,05	62	83,78	2	1,19	3	1,79	1	0,60	6	3,57	2,44	
Participant 12	203	30	10	98	48,28	80	81,63	2	0,99	2	0,99	0	0,00	4	1,97	3,00	
Participant 13	185	32	9	105	56,76	79	75,24	2	1,08	1	0,54	3	1,62	6	3,24	3,56	
Participant 14	175	29	9	93	53,14	67	72,04	0	0,00	3	1,71	1	0,57	4	2,29	3,22	
Participant 15	165	32	11	82	49,70	61	74,39	3	1,82	1	0,61	1	0,61	5	3,03	2,91	
Participant 16	203	26	10	97	47,78	84	86,60	1	0,49	3	1,48	3	1,48	7	3,45	2,60	
Participant 17	216	37	13	102	47,22	73	71,57	2	0,93	2	0,93	2	0,93	6	2,78	2,85	
Participant 18	164	29	11	78	47,56	69	88,46	1	0,61	1	0,61	1	0,61	3	1,83	2,64	
Participant 19	166	30	5	76	45,78	55	72,37	1	0,60	2	1,20	3	1,81	6	3,61	6,00	
Participant 20	206	36	16	100	48,54	70	70,00	0	0,00	6	2,91	4	1,94	10	4,85	2,25	
Participant 21	163	26	9	78	47,85	60	76,92	2	1,23	2	1,23	3	1,84	7	4,29	2,89	
Participant 22	191	27	10	79	41,36	57	72,15	2	1,05	3	1,57	0	0,00	5	2,62	2,70	
Participant 23	222	41	11	106	47,75	71	66,98	2	0,90	6	2,70	4	1,80	12	5,41	3,73	
Participant 24	159	24	9	72	45,28	47	65,28	2	1,26	2	1,26	2	1,26	6	3,77	2,67	
Participant 25	167	32	10	77	46,11	58	75,32	2	1,20	2	1,20	1	0,60	5	2,99	3,20	
Participant 26	134	26	8	60	44,78	50	83,33	4	2,99	2	1,49	2	1,49	8	5,97	3,25	
TOTAL	175,42	29,31	9,69	83,65	47,72	64,85	77,98	1,5	0,86	2,65	1,50	1,62	0,90	5,77	3,27	3,13	

# 10.9. Appendix 9: Results of 4°B PRE (bilingual section) on Excel

							F	PRE-MED	IATION							
		FLUENCY							(	COMPLEXIT	ГҮ					
				LEXICAL I	DENSITY	LEXICAL V	ARIATION	APPRAISAL DENSITY								
								ATTIT	TUDE	ENGAG	EMENT	GRADU	ATION	TO	TAL	CLA/T-UNIT
	Nº W	N° C	Nº T-UNIT	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	N°
Participant 27	161	32		72	44,72	40		2	1,24	5	3,11	1	0,62	8	4,97	3,56
Participant 28	122	22	8	60	49,18	39		1	0,82	2	1,04	2	1,64	5	7,10	2,75
Participant 29	199	31	8	98	49,25	65	,	2	1,01	2	1,01	0	0,00	4	2,01	3,88
Participant 30	160	27	8	82			,	1	0,63	3	1,88	2	1,25	6	3,75	3,38
Participant 31	213	37	12	114	53,52	79		4	1,88	4	1,88	3	1,41	11		3,08
Participant 32	193	29	12	94	48,70	74	70,72	2	1,04	1	0,52	2	1,04	5	-,0>	2,42
Participant 33	116	22	9	55		34		5	4,31	0	0,00	4	3,45	9	7,76	2,44
Participant 34	199	29		100	50,25	72		2	1,01	3	1,51	3	1,51	8	4,02	2,42
Participant 35	191	36		87	45,55	62	,	3	1,57	6	3,14	2	1,05	11	-,	3,60
Participant 36	200	29		97	48,50	81	83,51	5	2,50	1	0,50	2	1,00	8	4,00	3,22
Participant 37	192	35		90	46,88	63		0	0,00	1	0,52	1	0,52	2	1,04	2,92
Participant 38	239	34	12	115	48,12	89	7.7902	5	2,09	2	0,84	2	0,84	9	3,77	2,83
Participant 39	189	32	9	99	52,38	89		1	0,53	1	0,53	0	0,00	2	1,06	3,56
Participant 40	281	46	16	97	34,52	70	, = , = 0	8	2,85	5	1,78	2	0,71	15	5,34	2,88
Participant 41	209	33	13	103	49,28	67	65,05	1	0,48	1	0,48	1	0,48	3	1,44	2,54
Participant 42	170	24	11	82	48,24	60	73,17	0	0,00	2	1,18	1	0,59	3	1,76	2,18
Participant 43	179	28	9	86	48,04	59	68,60	5	2,79	0	0,00	2	1,12	7	3,91	3,11
Participant 44	175	27	11	87	49,71	62	71,26	2	1,14	3	1,71	0	0,00	5	2,86	2,45
Participant 45	224	35	11	104	46,43	86	82,69	3	1,34	6	2,68	1	0,45	10	4,46	3,18
Participant 46	247	43	13	129	52,23	68	52,71	5	2,02	3	1,21	5	2,02	13	5,26	3,31
Participant 47	187	29	6	81	43,32	42	51,85	0	0,00	5	2,67	3	1,60	8	4,28	4,83
Participant 48	195	33	12	86	44,10	71	82,56	2	1,03	5	2,56	0	0,00	7	3,59	2,75
Participant 49	113	20	6	54	47,79	48	88,89	2	1,77	2	1,77	1	0,88	5	4,42	3,33
Participant 50	182	36	13	83	45,60	65	78,31	0	0,00	2	1,10	1	0,55	3	1,65	2,77
Participant 51	189	38	13	89	47,09	80	89,89	3	1,59	3	1,59	1	0,53	7	3,70	2,92
Participant 52	216	34	10	105	48,61	76	72,38	0	0,00	3	1,39	2	0,93	5	2,31	3,40
Participant 53	213	34	13	97	45,54	69	71,13	3	1,41	5	2,35	1	0,47	9	4,23	2,62
Participant 54	213	40	5	100	46,95	66	66,00	3	1,41	3	1,41	1	0,47	7	3,29	8,00
Participant 55	180	28	9	92	51,11	62	67,39	2	1,11	2	1,11	2	1,11	6	3,33	3,11
TOTAL	191,28	31,83	10,38	90,97	47,73	65,45	72,00	2,48	1,29	2,79	1,45	1,66	0,90	6,93	3,65	3,22

## 10.10. Appendix 10: Results of 4°B POST (bilingual section) on Excel

							POS	ST-MED	IATION							
		FLUENCY								COMPLEXIT	Y					
				LEXICAL D	DENSITY	LEXICAL V	ARIATION	APPRAISAL DENSITY								
								ATTI	TUDE	ENGAGE	EMENT	GRADU.	ATION	TOT	AL	CLA/T-UNIT
	N° W	Nº C	Nº T-UNIT	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	N°
Participant 27	187	24	10	65	34,76	49	75,38	0	0,00	2	1,07	0	0,00	2	1,07	2,40
Participant 28	130	23	8	68	52,31	52	76,47	3	2,31	2	1,54	3	2,31	8	6,15	2,88
Participant 29	166	30	12	87	52,41	66		0	0,00	1	0,60	1	0,60	2	1,20	2,50
Participant 30	163	27	9	83	50,92	67	80,72	1	0,61	2	1,23	0	0,00	3	1,84	- /
Participant 31	230	39	11	110	47,83	78	70,91	6	2,61	3	1,30	3	1,30	12	5,22	3,55
Participant 32	153	24	11	76	49,67	64	84,21	0	0,00	3	1,96	0	0,00	3	1,96	2,18
Participant 33	90	16	8	52	57,78	47	90,38	1	1,11	0	0,00	0	0,00	1	1,11	2,00
Participant 34	153	27	10	79	51,63	65	82,28	1	0,65	4	2,61	1	0,65	6	3,92	2,70
Participant 35	169	33	12	86	50,89	70	81,40	3	1,78	4	2,37	1	0,59	8	4,73	2,75
Participant 36	135	25	12	71	52,59	63	88,73	3	2,22	3	2,22	0	0,00	6	4,44	2,08
Participant 37	161	28	11	83	51,55	62	74,70	2	1,24	3	1,86	0	0,00	5	3,11	2,55
Participant 38	152	29	9	82	53,95	66	80,49	2	1,32	2	1,32	0	0,00	4	2,63	3,22
Participant 39	178	35	12	89	50,00	79	88,76	1	0,56	5	2,81	1	0,56	7	3,93	2,92
Participant 40	169	30	9	97	57,40	80	82,47	3	1,78	1	0,59	2	1,18	6	3,55	3,33
Participant 41	164	29	10	85	51,83	72	84,71	0	0,00	4	2,44	0	0,00	4	2,44	2,90
Participant 42	126	18	9	64	50,79	56	87,50	1	0,79	0	0,00	0	0,00	1	0,79	
Participant 43	169	31	9	94	55,62	78	82,98	3	1,78	4	2,37	1	0,59	8	4,73	- ,
Participant 44	152	25	9	73	48,03	63	86,30	1	0,66	2	1,32	1	0,66	4	2,63	2,78
Participant 45	182	27	11	90	49,45	68	75,56	3	1,65	8	4,40	0	0,00	11	6,04	2,45
Participant 46	188	34	12	98	52,13	71	72,45	1	0,53	2	1,06	0	0,00	3	1,60	2,83
Participant 47	156	30	12	80	51,28	67	83,75	1	0,64	5	3,21	1	0,64	7	4,49	-,
Participant 48	154	28	11	75	48,70	62	82,67	1	0,65	3	1,95	0	0,00	4	2,60	
Participant 49	116	22	9	64	55,17	54	84,38	0	0,00	6	5,17	0	0,00	6	5,17	2,44
Participant 50	192	32	10	98	51,04	88	89,80	2	1,04	5	2,60	0	0,00	7	3,65	3,20
Participant 51	152	30	9	89	58,55	76	85,39	2	1,32	4	2,63	2	1,32	8	5,26	3,33
Participant 52	150	28	10	81	54,00	60	74,07	2	1,33	3	2,00	0	0,00	5	3,33	2,80
Participant 53	146	28	12	75	51,37	64	85,33	2	1,37	3	2,05	1	0,68	6	4,11	2,33
Participant 54	169	33	9	87	51,48	72	82,76	3	1,78	3	1,78	0	0,00	6	3,55	3,67
Participant 55	140	23	8	78	55,71	64	82,05	1	0,71	1	0,71	0	0,00	2	1,43	2,88
TOTAL	158,34	27,86	10,14	81,34	51,68	66,31	81,81	1,69	1,05	3,03	1,90	0,62	0,38	5,34	3,33	2,76

## 10.11. Appendix 11: Results of 4°C PRE (bilingual program) on Excel

							l	PRE-MEI	DIATION								
		FLUENCY							(	COMPLEXIT	Y						
				LEXICAL I	LEXICAL DENSITY LEXICAL VARIATION APPRAISAL DEN							DENSITY	ENSITY				
								ATTI	TUDE	ENGAG	EMENT	GRADU	ATION	TOT	'AL	CLA/T-UNIT	
	Nº W	Nº C	Nº T-UNIT	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº	
Participant 56	160	24	7	78	48,75	66	84,62	1	0,63	1	0,63	2	1,25	4	2,50	3,43	
Participant 57	182	31	9	96	52,75	67	69,79	2	1,10	1	0,55	0	0,00	3	1,65	3,44	
Participant 58	156	31	10	69	44,23	45	65,22	1	0,64	3	1,92	0	0,00	4	2,56	3,10	
Participant 59	207	35	10	99	47,83	57	57,58	2	0,97	8	3,86	0	0,00	10	4,83	3,50	
Participant 60	164	30	9	81	49,39	62	76,54	3	1,83	1	0,61	6	3,66	10	6,10	3,33	
Participant 61	163	25	8	72	44,17	42	58,33	0	0,00	2	1,23	0	0,00	2	1,23	3,13	
Participant 62	152	21	6	69	45,39	47	68,12	1	0,66	3	1,97	0	0,00	4	2,63	3,50	
Participant 63	178	25	6	90	50,56	61	67,78	0	0,00	2	1,12	0	0,00	2	1,12	4,17	
Participant 64	156	30	9	68	43,59	44	64,71	1	0,64	2	1,28	1	0,64	4	2,56	3,33	
Participant 65	120	20	10	53	44,17	32	60,38	0	0,00	1	0,83	0	0,00	1	0,83	2,00	
Participant 66	192	27	9	89	46,35	54	60,67	1	0,52	3	1,56	1	0,52	5	2,60	3,00	
Participant 67	144	23	5	68	47,22	47	69,12	0	0,00	2	1,39	1	0,69	3	2,08	4,60	
Participant 68	157	29	11	67	42,68	39	58,21	0	0,00	3	1,91	2	1,27	5	3,18	2,64	
Participant 69	147	15	8	65	44,22	27	41,54	1	0,68	0	0,00	3	2,04	4	2,72	1,88	
Participant 70	162	23	10	74	45,68	34	45,95	1	0,62	1	0,62	0	0,00	2	1,23	2,30	
Participant 71	143	24	10	76	53,15	56	73,68	1	0,70	2	1,40	0	0,00	3	2,10	2,40	
Participant 72	172	36	10	90	52,33	47	52,22	6	3,49	3	1,74	1	0,58	10	5,81	3,60	
Participant 73	172	31	12	85	49,42	42	49,41	3	1,74	0	0,00	0	0,00	3	1,74	2,58	
Participant 74	134	21	9	64	47,76	58	90,63	1	0,75	3	2,24	0	0,00	4	2,99	2,33	
Participant 75	151	27	8	74	49,01	50	67,57	1	0,66	2	1,32	0	0,00	3	1,99	3,38	
Participant 76	143	24	8	65	45,45	52	80,00	0	0,00	0	0,00	1	0,70	1	0,70	3,00	
Participant 77	268	42	12	144	53,73	98	68,06	2	0,75	2	0,75	1	0,37	5	1,87	3,50	
TOTAL	164,68	27,00	8,91	78,91	47,63	51,23	65,00	1,27	0,74	2,05	1,22	0,86	0,53	4,18	2,50	3,10	

## 10.12. Appendix 12: Results of 4°C POST (bilingual program) on Excel

	POST-MEDIATION															
		FLUENCY		COMPLEXITY												
				LEXICAL I	LEXICAL DENSITY LEXICAL VARIATION APPRAISAL DENSITY											
								ATTI	ΓUDE	ENGAG	EMENT	GRADU	ATION	TOT	`AL	CLA/T-UNIT
	Nº W	Nº C	Nº T-UNIT	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº W	%	Nº
Participant 56	197	39	13	95	48,22	69	72,63	3	1,52	4	2,03	0	0,00	7	3,55	3,00
Participant 57	123	24	9	61	49,59	47	77,05	1	0,81	3	2,44	0	0,00	4	3,25	2,67
Participant 58	122	25	9	58	47,54	42	72,41	1	0,82	4	3,28	0	0,00	5	4,10	2,78
Participant 59	114	24	10	58	50,88	48	82,76	3	2,63	3	2,63	1	0,88	7	6,14	2,40
Participant 60	162	30	12	92	56,79	75	81,52	3	1,85	1	0,62	1	0,62	5	3,09	2,50 2,50
Participant 61	106	20	8	58	54,72	48	82,76	2	1,89	0	0,00	1	0,94	3	2,83	
Participant 62	179	31	11	90	50,28	56	62,22	1	0,56	4	2,23	0	0,00	5	2,79	2,82
Participant 63	125	28	8	60	48,00	41	68,33	2	1,60	0	0,00	5	4,00	7	5,60	3,50
Participant 64	82	18	6	38	46,34	36	94,74	0	0,00	4	4,88	0	0,00	4	4,88	3,00
Participant 65	99	18	7	51	51,52	40	78,43	1	1,01	3	3,03	0	0,00	4	4,04	2,57
Participant 66	139	25	8	70	50,36	58	82,86	2	1,44	2	1,44	1	0,72	5	3,60	3,13
Participant 67	96	19	7	52	54,17	43	82,69	2	2,08	0	0,00	3	3,13	5	5,21	2,71
Participant 68	119	17	9	68	57,14	61	89,71	2	1,68	1	0,84	1	0,84	4	3,36	1,89
Participant 69	155	24	8	83	53,55	48	57,83	1	0,65	6	3,87	0	0,00	7	4,52	3,00
Participant 70	64	13	5	31	48,44	17	54,84	5	7,81	0	0,00	3	4,69	8	12,50	2,60
Participant 71	118	20	8	67	56,78	58	86,57	2	1,69	1	0,85	0	0,00	3	2,54	2,50
Participant 72	102	19	6	45	44,12	24	53,33	2	1,96	1	0,98	0	0,00	3	2,94	3,17
Participant 73	119	23	10	59	49,58	45	76,27	3	2,52	1	0,84	0	0,00	4	3,36	2,30
Participant 74	65	14	5	31	47,69	25	80,65	2	3,08	1	1,54	0	0,00	3	4,62	2,80
Participant 75	108	16	8	59	54,63	57	96,61	0	0,00	1	0,93	0	0,00	1	0,93	2,00
Participant 76	129	20	7	62	48,06	50	80,65	0	0,00	2	1,55	0	0,00	2	1,55	2,86
Participant 77	149	27	10	75	50,34	62	82,67	2	1,34	1	0,67	0	0,00	3	2,01	2,70
TOTAL	121,45	22,45	8,36	61,95	50,85	47,73	77,16	1,81	1,68	1,95	1,57	0,73	0,72	4,50	3,97	2,70

## 10.13. Appendix 13: Results of 4°D (bilingual program) on Excel

	PRE-MEDIATION															
		FLUENCY								MPLEXITY	Y					
				LEXICAL	DENSITY	LEXICAL	VARIATION	APPRAISAL DENSITY								
								ATTI	TUDE	ENGAG	EMENT	GRADU	ATION	ТОТ	AL	CLA/ T-UNITS
	Nº W	Nº C	Nº T-UNITS	Nº W	%	N° W	%	Nº W	%	Nº W	%	N° W	%	Nº W	%	N °
Participant 78	180	28	10	84	46,67	55	65,48	0	0,00	4	2,22	0	0,00	4	2,22	2,80
Participant 79	164	24	10	76	46,34	41	53,95	1	0,61	4	2,44	2	1,22	7	4,27	2,40
Participant 80	182	36	16	99	54,40	57	57,58	3	1,65	1	0,55	0	0,00	4	2,20	2,25
Participant 81	140	22	7	62	44,29	50	80,65	0	0,00	1	0,71	0	0,00	1	0,71	3,14
Participant 82	184	29	11	93	50,54	72	77,42	2	1,09	3	1,63	0	0,00	5	2,72	2,64
Participant 83	22	4	3	11	50,00	9	81,82	0	0,00	0	0,00	0	0,00	0	0,00	1,33
Participant 84	167	23	8	72	43,11	55	76,39	1	0,60	3	1,80	2	1,20	6	3,59	2,88
Participant 85	54	7	3	30	55,56	27	90,00	0	0,00	0	0,00	0	0,00	0	0,00	2,33
Participant 86	109	17	5	53	48,62	47	88,68	1	0,92	1	0,92	2	1,83	4	3,67	3,40
Participant 87	69	12	5	39	56,52	25	64,10	0	0,00	0	0,00	0	0,00	0	0,00	2,40
Participant 88	145	25	7	75	51,72	51	68,00	2	1,38	1	0,69	1	0,69	4	2,76	3,57
Participant 89	67	11	4	37	55,22	31	83,78	1	1,49	1	1,49	0	0,00	2	2,99	2,75
Participant 90	104	21	8	51	49,04	43	84,31	3	2,88	2	1,92	1	0,96	6	5,77	2,63
Participant 91	110	21	9	55	50,00	44	80,00	4	3,64	1	0,91	0	0,00	5	4,55	2,33
Participant 92	63	11	3	34	53,97	26	76,47	1	1,59	2	3,17	0	0,00	3	4,76	3,67
Participant 93	158	24	7	81	51,27	58	71,60	2	1,27	3	1,90	0	0,00	5	3,16	3,43
Participant 94	154	26	10	66	42,86	48	72,73	1	0,65	4	2,60	0	0,00	5	3,25	2,60
Participant 95	37	6	4	19	51,35	13	68,42	2	5,41	0	0,00	0	0,00	2	5,41	1,50
Participant 96	142	25	7	55	38,73	25	45,45	4	2,82	7	4,93	0	0,00	11	7,75	3,57
Participant 97	116	15	6	56	48,28	31	55,36	2	1,72	0	0,00	0	0,00	2	1,72	2,50
Participant 98	172	27	10	77	44,77	62	80,52	3	1,74	3	1,74	1	0,58	7	4,07	2,70
Participant 99	19	2	2	10	52,63	6	60,00	0	0,00	0	0,00	0	0,00	0	0,00	1,00
Participant 100	103	10	6	61	59,22	51	83,61	0	0,00	0	0,00	0	0,00	0	0,00	1,67
TOTAL	115,70	18,52	7,00	56,35	49,79	40,30	72,45	1,43	1,28	1,78	1,29	0,39	0,28	3,61	2,85	2,59

## 10.14. Appendix 14: Means and standard deviations for the Figures in Section 6

Differences in CAF measures between bilingual section and bilingual program.

					COMPARISON BETWEEN BILINGUAL SECTION & BILINGUAL PROGRAM					
		SEC	ΓΙΟΝ	PROGRAM						
				MEAN	STD.D	MEAN	STD.D			
	NUMBER OF WORDS				32,35	139,54	48,27			
FLUENCY	NUMBE	R OF CLAUSI	ES	30,64	5,57	22,65	8,60			
	NUM	BER T-UNIT		10,05	2,39	8,02	2,85			
	LEXICAL	LEXICAL DENSITY  N° W  %			15,48	67,56	23,89			
	LEMICA				-	48,41	-			
	LEXICAL VARIATION			65,16	12,28	45,46	16,60			
	EEMCAE	%			-	67,72	-			
		A TOTAL LINE	Nº W	2,02	1,62	1,31	1,29			
G015D1 D117D1		ATTITUDE :	%	1,09	-	0,94	-			
COMPLEXITY		ENGAGEMENT	Nº W	2,73	1,54	1,88	1,70			
	APPRAISAL DENSITY	ENGAGENIENT	%	1,49	1	1,35	-			
		GRADUATION	Nº W	1,64	1,18	0,58	1,10			
		GRADUATION	%	0.89	-	0.42	-			
		TOTAL	Nº W	6,38	2,84	3,77	2,67			
		IOIAL	%	3,47	-	2,70	-			
	CLAU	USES/T-UNITS		3,18	0,9	2,81	0,71			

Differences in CAF measures in the PRE and POST mediation of bilingual section students.

			COMPARISON BETWEEN PRE & POST MEDIATION IN BILINGUAL SECTION					
			PR	E	PO	ST		
			MEAN	STD.D.	MEAN	STD.D.		
NUMBER OF WORDS			191,28	35,55	158,34	25,668		
FLUENCY	NUMBER OF CLAUS	31,83	5,97	27,86	4,85			
	NUMBER T-UNIT	10,38	2.48	10,14	1,36			
	LEXICAL DENSITY	Nº W	90,97	16,45	81,34	12,16		
COMPLEXITY		%	47,73%	-	51,68%	-		
	LEXICAL VARIATION	Nº W	65,45	14,15	66,31	9,36		
		%	72,00%	-	81,81%	-		

		ATTITUDE	N° W	2,48	1,92	1,69	1,32
			%	1,29%	-	1,05%	-
		ENGAGEMENT	N° W	2,79	1,69	3,03	1,73
	APPRAISAL DENSITY		%	1,45%	-	1,90	-
COMPLEXITY		GRADUATION	N° W	1,66	1,15	0,62	0,89
			%	0,90%	-	0,38%	-
		mom	N° W	6,93	3,14	5,34	2,69
		TOTAL	%	3,65%	-	3,33%	-
	CLA	USES/T-UNITS		3,22	1,05	2,76	0,45

Differences in CAF measures in the PRE and POST mediation of bilingual program students.

				COMPARISON BETWEEN PRE & POST MEDIATION IN BILINGUAL PROGRAM					
					RE	PO	OST		
				MEAN	STD.D.	MEAN	STD.D.		
	NUMB	BER OF WORDS	S	164,68	29,39	121,45	32,33		
FLUENCY	NUMBI	ER OF CLAUSE	CS .	27	5,92	22,45	5,99		
	NUN	MBER T-UNIT		8,91 1,78 8,36 2					
	LEXICAL	L DENSITY	Nº W	78,91	18,20	61,95	17,30		
		%			-	50,85	-		
	LEXICAL	LEXICAL VARIATION			14,61	47,52	13,94		
			%	65,00	-	77,16	-		
			Nº W	1,27	1,35	1,81	1,15		
COMPLEXIES		ATTITUDE ENGAGEMENT	%	0,74	-	1,68	-		
COMPLEXITY			Nº W	2,05	1,64	1,95	1,64		
	APPRAISAL DENSITY	ENGAGEMENT	%	1,22	-	1,57	-		
	DENSITI	GD 1 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nº W	0,86	1,39	0,73	1,29		
		GRADUATION	%	0,53	-	0,72	-		
		mom. r	Nº W	4,18	2,57	4,5	1,78		
		TOTAL	%	2,5	-	3,97	-		
	CLA		3,09	0,33	2,70	0,36			