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**Pretask modelling: Encouraging learning opportunities in
collaborative tasks**

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TABLE OF CONTENTS

Abstract.....	6
1. Introduction.....	7
2. Theoretical background.....	9
2.1. The Interaction Hypothesis.....	9
2.2. The Output Hypothesis.....	11
2.3. Sociocultural Theory.....	14
2.4. Collaborative dialogue.....	17
2.4.1. Language-related episodes.....	17
2.4.2. Pretask modelling.....	23
2.4.3. Pair dynamics.....	25
2.4.4. Task-modality and its impact on LREs.....	31
3. The present study.....	32
3.1. Research questions and hypotheses.....	33
3.2. Participants.....	34
3.3. Materials.....	38
3.3.1. Communicative tasks.....	38
3.3.2. Pretask modelling activities.....	41
3.4. Design and procedure.....	43
4. Data analysis and codification.....	44
4.1. Language-related episodes.....	44
4.2. Pair dynamics.....	48

5. Results and discussion.....	51
5.1. Occurrence of LREs.....	51
5.2. Pair dynamics.....	57
5.3. Task modality.....	62
6. Conclusions and lines for further research.....	66
References.....	72

Appendices:

Appendix 1: Parents' consent

Appendix 2: Language background questionnaire

Appendix 3: Syllabus

Appendix 4: Picture differences and dictogloss task

Appendix 5: Length of the collaborative tasks

Appendix 6: Sample of pair transcriptions

Appendix 7: Sample of pretask modelling

ABSTRACT

This study examined the effect of pretask modelling on the collaborative learning opportunities that arise when 30 Basque-Spanish bilingual learners of English as a foreign language (EFL) were engaged in two collaborative tasks: dictogloss and picture differences. The experimental group (n=16) watched videotaped models of collaborative pair interactions prior to the tasks, whereas the control group (n=14) did not receive pretask modelling. This study replicated the methodological approach in Kim and McDonough (2011), using the same pretest instrument, but instead of three, only two collaborative activities were carried out. The interaction between learners was analysed in terms of type and resolution of language-related episodes (LREs) and learners' pair dynamics. Besides, task-modality differences in terms of LRE occurrence were also examined. Results indicated that learners who received pretask modelling produced and correctly solved more LREs than those who did not receive any model, although significant differences could not always be reported. They also featured more collaborative pair dynamics than learners not receiving any model and confirmed the existence of a task-type effect on the type of LRE production—dictogloss generated more form-focused LREs than the picture differences task—and on the outcome of LREs—more correctly resolved form-focused LREs in the dictogloss task.

1. Introduction

Over the past three decades an increasing number of studies has examined the impact of task-based interaction on second language (L2) learning since the traditional teacher-fronted L2 classes have been claimed to lead not only to limited production on the part of learners, but also to a restricted range of L2 functions (Long & Porter, 1985; Pica, 2002). Pair and small group activities involving interactions and discussions between learners are a common practice in foreign language classrooms nowadays, for both theoretical and pedagogical reasons. On the one hand, the Interaction Hypothesis (Gass, 1997; Long, 1996; Mackey, 2007 and Pica, 1994, 2013) states that interaction may facilitate L2 learning by providing learners with negative feedback (information about the ungrammaticality of their utterances), drawing their attention to language form in the context of meaning, and pushing them to produce more complex and/or accurate target language forms (Swain, 2000). Besides, the Output Hypothesis (Swain, 1995) claims that producing language may facilitate acquisition by creating opportunities for learners to notice interlanguage and target language forms, test their hypotheses about the target language, and reflect on their language use. When learners notice a mismatch between their interlanguage and target language forms, they may resort to their L2 knowledge to modify their previous output, which may lead them to produce more accurate and/or complex language (Swain, 1993, 1995).

On the pedagogical front, pair and small group activities are argued to provide learners with more time to use the target language than teacher-fronted activities, to promote learner autonomy and self-directed learning, and to give instructors opportunities to work with individual learners (Brown, 2001; Crookes and Chaudron, 2001; Harmer, 2001; Long & Porter, 1985). In addition, learners may feel less

anxious and more confident when interacting with peers during pair or small group activities than during whole-class discussions (Brown, 2001; Davis, 1997; Willis, 1996).

Most research on learner-learner and learner-native speaker interaction has been conducted within the interactionist framework (see García Mayo & Alcón Soler, 2013, for a review). However, more recent studies have been carried out within the framework of Sociocultural Theory (Vygotsky, 1978), which focuses on learners' collaboration when solving language-related problems and facilitates the co-construction of new knowledge about language (Donato, 1994; Ohta, 2000, 2013; Swain, 2000). The present study follows this new line of investigation to analyse and compare the production of language-related episodes (LREs; Swain & Lapkin, 1998) in pair work during collaborative tasks taking into account the influence of pretask modelling activities.

There is little research available on this topic since only the study by Kim and McDonough (2011) has made so far a comparison of pair collaborative work with pretask modelling activities in an English as a Foreign Language (EFL) context. Therefore, the present study, using the aforementioned Kim and McDonough's (2011) model of pretask planning, aims to investigate whether having a videotaped model of the expected dialogue before carrying out a collaborative task in pairs would affect participants' interactional patterns. In order to evaluate the impact of pretask modelling, several factors will be considered when accounting for the amount of LREs produced in the collaborative activity: the frequency and outcome of LREs, pair dynamics and task type.

Following this introduction, section 2 deals with the theoretical background, where relevant theories, previous studies and key concepts are presented and

explained. Section 3 focuses on the present study, including the research questions and hypotheses, and information about the methodology followed when the experiment was conducted, namely participants' information, tasks and procedures. Section 4 explains data coding and analysis, while section 5 concentrates on the results and their discussion. Finally, section 6 concludes the study acknowledging its limitations and providing lines for future research.

2. Theoretical background

2.1. The Interaction Hypothesis

During the 1960s and 1970s some research on sociolinguistics began to pay more attention to the role of conversational interaction in second language acquisition (SLA). In particular, Garfinkel (1967) and Hatch (1978a, 1978b) among others focused on the role of negotiated interaction between a native (NS) and a non-native speaker (NNS) or between two NNS when there was a breakdown in communication. In Garfinkel (1967), the term *negotiation* was used to refer to the process by which participants structure their social relationships in a conversation, taking turns at talking and communicating meaning to each other. Although negotiation as a term did not appear in the SLA literature until 1980 with Schwartz's (1980) work.

An example of how negotiated interaction may be operating to facilitate L2 development can be seen in Example (1). This example features a conversation between an English NS and an English L2 speaker illustrating a situation of negotiation where one interlocutor indicates that the message has not been conveyed successfully:

- (1) 1 NS: There's...there's a...a pair of reading glasses above the plant.
2 NNS: A what?
3 NS: Glasses...reading glasses to see the newspaper?
4 NNS: Glassi?
5 NS: You wear them to see with, if you can't see. Reading glasses.
6 NNS: Ahh ahh glasses... glasses to read you say reading glasses.
7 NS: Yeah.

(Mackey, 1999: 558-559)

In this example, the NNS does not understand the word *glasses*, which can be seen by the question he poses in the second turn, known as a clarification request. The word is repeated by the NS and he gives an example, but the NNS does not understand him properly yet. Only when the NS extends and rephrases the original sentences in the fifth turn, is the learner able to fully comprehend him. The NS draws the learner's attention to the problematic utterance, making the NNS notice the difference to target-like production and modify his output.

Hatch (1978a, 1978b) argued that analysing the properties of *foreigner talk*, a simplified variety of the language used by NSs to address foreigners, could provide information not only about social aspects of the language type addressed but also about the linguistic features of the L2 learning process. According to García Mayo and Alcón Soler (2013), Hatch's contribution was a "turning point in the study of learner language" (2013: 211) since she maintained that the learning of the L2 evolved out of communicative use and not the opposite, as other authors such as Krashen (1982, 1985) believed. According to the latter, a learner first acquires the language and then uses it. Krashen's Input Hypothesis (1982, 1985) claims that

comprehensible input is a necessary and sufficient condition for SLA, putting forward the idea that acquisition leads to using the language rather than the other way round, and that comprehensible input is enough for grammatical knowledge to emerge. By contrast, Hatch insists that learning takes place through interaction and this benefits the learning process.

Long's Interaction Hypothesis (1983, 1985, 1996) evolved from work by Hatch (1978a, 1978b) on the importance of conversation to developing grammar and from claims by Krashen's Input Hypothesis (1985) that comprehensible input is a necessary condition for SLA. Long's hypothesis holds that there is a strong connection between learners' engagement on conversational interaction and L2 acquisition, and states that during interaction the learner receives feedback, noticing differences between his production and the target language, which pushes him to modify the language he produces—output—(Swain, 1985). In this way, Swain who defended that target-like proficiency could not be achieved only with an input-rich and communicatively oriented environment proposed the Output Hypothesis (Swain 1985, 1995, 2005).

2.2. *The Output Hypothesis*

The Output Hypothesis states that “the act of producing language (speaking or writing) constitutes, under certain circumstances, part of the process of second language learning” (Swain, 2005: 471). Originally, the context in which this hypothesis was formulated was influenced by two main issues: first, the dominant theoretical paradigm for SLA at the time—information-processing theory, based on the aforementioned Krashen's (1982, 1985) Input Hypothesis and on Long's (1983, 1985) first ideas about negotiation—and, second, the French immersion programmes

in Canada. The results from empirical studies carried out in these programmes demonstrated that the proficiency in French of the immersion students was more advanced than that of students taking 20 to 30 minutes a day of French as second language (FSL), that is, the larger the amount of input the better the proficiency results. However, to the surprise of some, the speaking and writing abilities of French immersion students were different from those of their Francophone peers. It was these latter findings that raised doubts about the validity of the Input Hypothesis (Krashen, 1985), and most particularly, about the argument that comprehensible input was “the only true cause of second language acquisition” (Krashen, 1984:61).

Alternative explanations were sought and Swain’s Output Hypothesis, based on both informal and formal observations of immersion classrooms, was considered as one possible option. Swain argued that immersion students did not talk as much in the French portion of the day in French as they did in English in their English portion because “teachers did not ‘push’ the students to do so in a manner that was grammatically accurate or sociolinguistically appropriate” (Swain, 2005: 472). This author also claimed that simply getting one’s message across can occur with ungrammatical or sociolinguistically inappropriate language and that the concept of negotiating meaning needs to be extended, incorporating the notion of being pushed towards a precise, coherent and appropriate delivery of a message, and not just the simple conveying of that message.

Example (2) shows an interaction episode between a NNS and a NS, providing evidence for the notion of “pushed output”.

- (2) 1 NNS: And in hand in hand have a bigger glass to see
2 NS: It's err. You mean, something in his hand?
3 NNS: Like spectacle. For older person.
4 NS: Mmm, sorry I don't follow, it's what?
5 NNS: In hand have he have has a glass for looking through for make
the print bigger to see, to see the print, for magnify.
6 NS: He has some glasses?
7 NNS: Magnify glasses he has magnifying glass.
8 NS: Oh aha I see a magnifying glass, right that's a good one, ok.

(Mackey, 2002: 384)

The NS is 'pushing' the learner to think harder in order to find the correct word so he can understand. Mackey (2002) had adult English as a Second Language (ESL) learners watch videotapes of themselves interacting with others and asked them to recall what they were thinking at the time when the original interaction occurred. In this way, the stimulated recalls of those learners, instantiations of the perception of 'being pushed', were used as evidence in favour of the Output Hypothesis.

Nowadays, there is abundant research arguing for the existence of a relationship between conversational interaction and L2 development (Adams, 2007; Fujii & Mackey, 2009; García Mayo & Alcón Soler, 2013; Mackey & Goo, 2007; Pica, 1994; Swain & Lapkin, 1998). Generally speaking, results indicate that interaction has a positive effect on L2 learning, showing that those learners who are more actively involved in a conversation are able to perform more accurate or target-like. Research on the interactionist field highlights the importance of negotiation in a conversation in order to focus learners' attention on language and, in this way, as

language is made salient, language learning would be promoted. Furthermore, learners cannot only receive feedback from their interlocutors on their own output during negotiation, but also discuss their interlocutors' production. Thus, when their output is not target-like, negotiation gives the opportunity to modify and correct it as far as the interlocutors know the correct form.

Although the Interaction Hypothesis has been very influential in the field of SLA, interaction researchers have always acknowledged that negotiation is not the only source for language learning (Pica, 1996). In fact, already back in 1989, Skehan's exhaustive review had already shown that numerous factors come into play, including the learner's own attitude, aptitude, motivation, developmental readiness, and time spent on language learning and use. The next section will provide a brief overview of one of the latest approaches to the role of interaction in SLA; Sociocultural Theory.

2.3. Sociocultural Theory

Sociocultural Theory (SCT) is an integrative approach of human development and cognition mainly built upon the work of Vygotsky (1978) and it is considered one of the major theoretical approaches to explain the process of L2 learning nowadays. Within this framework, human cognitive development is a socially situated activity mediated by language and interaction and peer activity are considered crucial factors for L2 learning (Ohta, 2013; Vygotsky, 1978).

A numerous group of studies has prioritized examining developmental processes from a holistic perspective, as they occur in learners' interactions (Donato, 1988, 1994; Lantolf, 2000; Lantolf & Thorne, 2007; Ohta, 2000, 2001; Swain & Lapkin, 1998); since L2 acquisition, in Ohta's (2000: 51) words: "[...] is not

considered to be wholly resident in the mind of the language learner [...], but the learner-and-environment are seen in a holistic perspective”. That is to say, language is not only a genetic artefact and it also depends on social factors such as conversational interactions. SCT itself has three main tenets: mediation, the zone of proximal development and activity theory.

In Ohta’s (2013) opinion, mediation is the most important notion in SCT and it refers to “the process through which human activity, including mental activity, incorporates a range of tools, and how these tools function to transform activity and mind” (Ohta, 2013: 649-650). Mediation concerns the human thinking, which incorporates culturally constructed artefacts, concepts and activities such as music, art or numbers, including language (Lantolf & Thorne, 2007). The second tenet, the zone of proximal development (ZPD) can be best understood as a kind of activity whereby a person is enabled to do more than s/he could have accomplished individually through some type of assistance. Incorporating assistance means, then, that the individual’s learning potential can be assisted with the help of someone more capable, an expert. Activity theory, the third tenet, focuses on the role of human activity in cognitive development, which includes three levels: the motives, the actions and the conditions (Leontiev, 1978).

Vygotsky’s main methodological argument is that in order to understand an individual it is necessary to study that individual in the context of his history as a socio-cultural being (Gánem-Gutiérrez, 2013). The Russian psychologist explains that higher cognitive functions appear first on the social plane (intermental) and later on the psychological plane (intramental), so that learning originates in social interactions between individuals—a *novice* (learner) and an *expert* (a more capable individual). It is this expert’s help that can make the novice focus the attention on his own

performance and lead him to perform beyond his actual level, a process known as *scaffolding* in the literature. Wood, Bruner and Ross' (1976) idea of scaffolding parallels the work of Vygotsky, which they describe as a temporary framework that is built up for support and access to meaning and later removed as needed when the learner is able to perform independently.

The original definition of expert—a teacher or instructor—resulted in the belief that the relationship between novice and expert could only be unidirectional, from the expert's direction to the novice's one. Today, this belief has been replaced with the idea that scaffolding can occur both ways in interactions between true peers who may or may not have great expertise (Ohta, 2001) and between individuals as well as in groups (Guk & Kellogg, 2007). A group of studies in SLA has shown that same level learners are able to scaffold each other by combining their linguistic knowledge and resources, resulting in a level of performance beyond their individual level of competence (Alegria de la Colina & García Mayo, 2007; Donato, 1994; Guk & Kellogg, 2007; Ohta, 2000, 2001; Swain & Lapkin, 1998). Simply being placed into groups or pairs and assigned language tasks, however, is not sufficient for scaffolding, for language to be internalised by the learner. Peers vary in how collaborative and mutually supportive their interactions are (Storch, 2002a). Therefore, studies conducted from the sociocultural perspective promote the use of collaborative tasks in the L2 classroom in order to solve language-related problems, since these sort of tasks have been found to promote peer interaction (Alegria de la Colina & García Mayo, 2007; Azkarai & García Mayo, 2015; Basterrechea & García Mayo, 2013; García Mayo & Azkarai, in press; Kim & McDonough, 2008; Swain & Lapkin, 1998, 2001). Collaborative dialogue and collaborative tasks will be further discussed in the following sections.

2.4. Collaborative dialogue

Collaborative learning is heavily rooted in Vygotsky's views that there exists an inherent social nature of learning which is shown through his theory of zone of proximal development (Lee & Smagorinsky, 2000). From a SCT of mind perspective, internal mental activity has its origins in external dialogic activity, that is, human cognitive ability is generated by social activity (Lantolf & Thorne, 2007). Therefore, socially situated cognitive processes can lead to the collaborative construction of language knowledge and to its subsequent use by the learner in a totally independent manner. Swain (1997) defines the notion of collaborative dialogue as a dialogue where linguistic knowledge is constructed by the joint effort of two or more individuals. She argues that in collaborative dialogue learners attempt to solve linguistic problems through shared effort and, as a result, they move beyond their current cognitive and linguistic state. More recently, Swain has described collaborative dialogue as a form of *linguaging*, a "process of making meaning and shaping knowledge and experience through language" (Swain, 2006: 89). In sum, the learner is assumed to be able to take in the knowledge constructed in collaborative dialogue and transform it into individual knowledge, making collaborative dialogue supports L2 learning.

2.4.1. Language-related episodes

The concept of collaborative dialogue is operationalized through language-related episodes (LREs) which have been defined as segments of conversation in which language learners "talk about the language they are producing, question their language use, or correct themselves or others" (Swain & Lapkin, 1998: 326). These episodes are triggered when learners discuss the language they are using in order to

solve their language-related difficulties. In this study, LREs are analysed in terms of their nature—form-based and lexical-based—and their outcome—correctly resolved, incorrectly resolved and unresolved—. In form-based LREs attention is drawn to grammar while in lexical-based LREs focus is on lexis. Form-based LREs include those occasions in which students discuss spelling, phonetic, morphological, syntactic, or discourse features, and are accordingly subclassified into linguistic categories following the taxonomy used by Alegría de la Colina and García Mayo (2007), Leaser (2004) or Williams (1999), among others. Figure 1 illustrates this information:

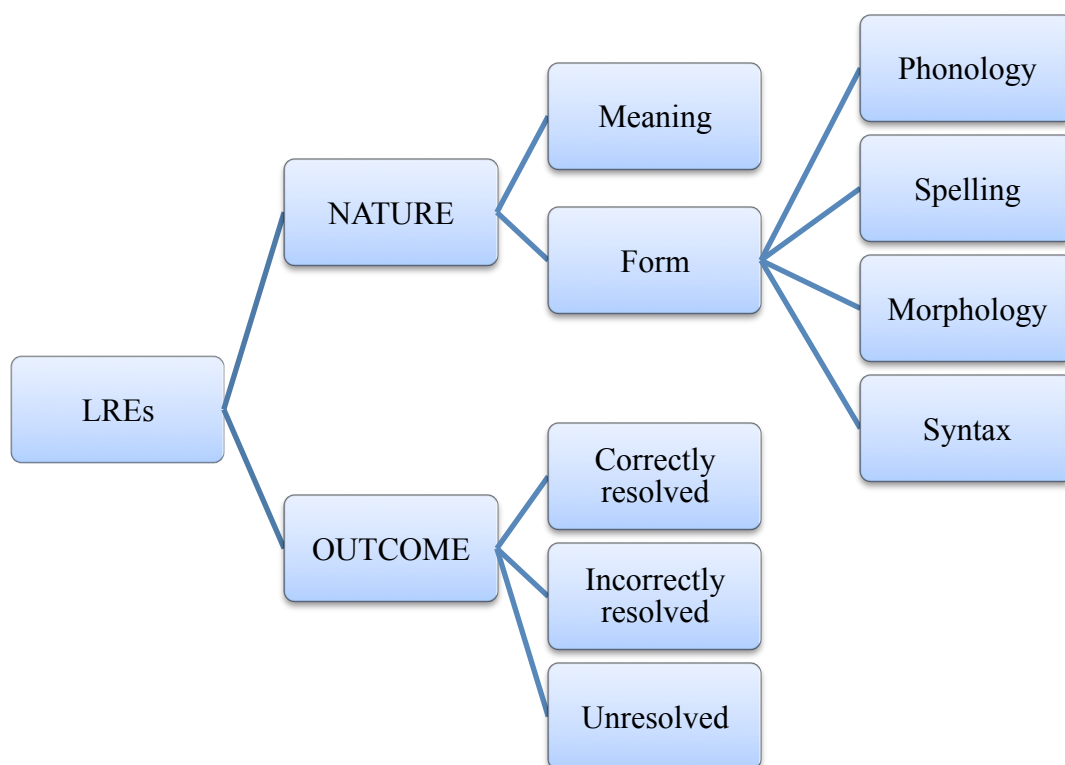


Figure 1. Categorization of LREs

The following examples illustrate form-based and lexis-based LREs, with resolved and unresolved outcomes. Example (3) below presents a correctly solved

form-based LRE which focuses on morphology. The learners are deliberating over the verb tense of the verb *appear*, while completing a dictogloss task. Learner 1 suggests that the tense should be past, but learner 2 rejects that suggestion and offers the correct solution (turns 2 and 6) because the text was in present tense:

- (3) 1 Learner 1: new bands
2 Learner 2: that don't appear
3 Learner 1: appeared
4 Learner 2: huh?
5 Learner 1: appeared
6 Learner 2: no, that don't appear

(Basterrechea & García Mayo, 2013: 32)

Example (4) illustrates a correctly solved form-based LRE which is focused on syntax. The students carrying out a text editing task try to find out the correct word order for the sentence. At the end, in turn 6, Ana provides the correct word order:

- (4) 1 Cecilia: If there...
2 Ana: If there was
3 Cecilia: If there really was...No.
4 Ana: If really there was. No?
5 Cecilia: If there was really? No.
6 Ana: If there really was. Yeah!

(García Mayo & Azkarai, in press)

Example (5) shows a correctly solved form-based LRE which is focused on phonetics. The two students are completing a picture differences task, Iria mispronounces the word ‘hat’ (/hæt/) (turn 3) and Sergio corrects her pronunciation in turn 4.

- (5) 1 Iria: He has a carrot in his nose.
2 Sergio: Yes.
3 Iria: Han /hæn/? A green han /hæn/? Han /hæn/?
4 Sergio: Hat /hæt/!
5 Iria: *O sea* [I mean], hat /hæt/!

(García Mayo & Azkarai, in press)

Example (6), illustrates a lexical LRE that is left unresolved. While completing a dictogloss task, S1 asks his/her partner what the Spanish verb ‘*marcharse*’ (‘to leave’) means (turn 1), but the other student does not know the answer (turn 4). The problem then is left unresolved.

- (6) 1 S1: ¿*Qué es marcharse?* [What is *marcharse*?]
2 S2: Hmmm?
3 S1: ¿*Qué significa marcharse?* [What does *marcharse* mean?]
4 S2: *Mmmm...no sé...* [Mmmm...I don’t know]

(Leeser, 2004: 66)

Finally, Example (7) shows an incorrectly solved lexical LRE. S2 asks S1 about the use of the preterit form of the Spanish verb ‘*emigrar*’ (to emigrate), but

instead of using the two possible options (third-person plural form to agree with *muchos* or third-person singular to agree with *gente*), they settled on the first-person singular form instead, which is incorrect.

- (7) 1 S2: *Muchos...¿emigré? Pretérito?*
[Many...emigrated (first-person sing.) Preterit?]
- 2 S1: *Creo que emigré a Estados Unidos y a España*
[I think that emigrated (first-person sing.) to the U.S. and Spain]
- 3 S2: *Sí, emigré* [Yes, emigrated (first-person sing.)]
- 4 S1: *Emigré gente, emigré* [Emigrated (first-person sing.) people. Emigrated.]

(Leeser, 2004: 66)

Several theoretical approaches to L2 acquisition, including SCT, claim that pair and small group activities generate learning opportunities through various interactional features that occur when learners engage in the communication of meaning. Regardless of their varied theoretical and pedagogical arguments, different studies have found the same result: while carrying out collaborative tasks learners (i) direct their attention to language form, (ii) are remarkably successful at providing each other with feedback or answering their questions and (iii) remember or even produce those language forms discussed in the collaborative tasks. More specifically, research has shown that the production of interactional feedback and LREs in collaborative activities depends on several factors such as: learners' proficiency level (Kim & McDonough, 2008; Leeser, 2004; Storch & Aldosari, 2013; Watanabe &

Swain, 2007, 2008), pair dynamics (Storch, 2002a, 2002b; Storch & Aldosari, 2010), planning time (Li, Chen & Sun, 2015; Philp, Oliver & Mackey, 2006) and task type (Alegría de la Colina & García Mayo, 2007; García Mayo, 2002a, 2002b; García Mayo & Azkarai, in press; Swain & Lapkin, 2001). Storch (2008) also analysed the impact of learners' level of engagement in LREs while doing collaborative work. By 'engagement' she meant a term "to describe the quality of the learners' metatalk" (Storch, 2008: 98), in which metatalk would refer to the act of talking cooperatively about how learners communicate. She discovered that the higher the level of learners' engagement, the more chances they have to develop their L2. Another relevant factor in the production of LREs in collaborative activities seems to be learners' first language (L1) use since several authors such as Alegría de la Colina and García Mayo (2009) and Storch and Aldosari (2010), among others, claim that the L1 is an important tool for EFL learners and that task type has a great impact on the amount of L1 used (Azkarai & García Mayo, 2015). Finally, Kim and McDonough's (2011) study examines the effect of pretask modelling on the collaborative learning opportunities that occur while Korean EFL students carry out certain task-based activities.

However, some studies have suggested that the general frequency of interactional feedback and LREs may be low and produced by few learners (Foster & Ohta, 2005; Slimani-Rolls, 2005). Along the same lines, some others have even questioned whether collaborative tasks contribute to L2 learning (Carless, 2003; McDonough, 2004). Therefore, these findings underline the need to find effective strategies to implement in collaborative activities and see in which context they could be beneficial for L2 learning.

As previous research has pointed out, collaborative tasks are beneficial when they elicit collaborative pair dynamics and a high level of engagement, so it is crucial to discover successful techniques in order to make learners interact using these features. In previous studies, beneficial interaction was encouraged during collaborative tasks by providing information about grammatical forms before carrying out the tasks (Leeser, 2004, Swain, 1998; Swain & Lapkin, 2001), training learners to notice and repair their linguistic errors (Bouffard & Sarkar, 2008), and modelling the way in which learners ought to interact (Kim & McDonough, 2008, 2011; Swain, 1998; Swain & Lapkin, 1998, 2001). However, few of these studies have examined the effect of these pedagogical techniques on learners' subsequent performance.

Since the present study focuses its attention on learners' LRE production after watching a videotaped model of how to interact, some of the factors mentioned above, which are relevant for the current study, are further discussed in the next subsections: pretask modelling, pair dynamics and task type.

2.4.2. Pretask modelling

Previous studies have used pretask modelling to encourage the occurrence of LREs during collaborative tasks. One study that tested whether pretask modelling influenced the occurrence of learning opportunities during collaborative tasks was LaPierre's (1994). In this study, French immersion students carried out one dictogloss task per week over a three-week period. Half of the learners watched their teacher and the researcher demonstrate how to talk about grammatical forms using metalinguistic terms before doing the task. The other learners watched their teacher and the researcher talk about grammatical forms without mentioning any explicit rules or terms. Results indicated that students receiving modelling with metalinguistic terms

generated more LREs than students receiving modelling without metalinguistic terms, highlighting the potential benefit of pretask modelling for encouraging learners to discuss linguistic forms during collaborative tasks. Nevertheless, since the focus of this study was to compare the effectiveness of different types of pretask modelling, the findings did not shed light on whether learners who received pretask models benefitted more than learners who did not.

Swain and Lapkin (1998) showed adolescents in a French immersion class a videotape in which two students worked together to create a story based on picture prompts. Their interaction included segments of conversation in which the students talked about grammatical forms and lexical items. The video was intended to serve as a model of what the students should do when they received a set of pictures to narrate. In a subsequent study that compared the effectiveness of two task types (jigsaw and dictogloss) in the same instructional context (Swain & Lapkin, 2001), the teacher also showed a video of two students talking about grammatical and lexical items while carrying out a collaborative task. In these studies, pretask modelling was used along with other pedagogical techniques, such as a mini-lesson about relevant forms and practice activities, in order to prepare students for the collaborative tasks. However, as the role of pretask modelling was not the main focus of the research, these studies did not examine whether the learners' collaboration was positively impacted by the video models.

Kim and McDonough's (2011) study aimed to go further and, for this reason, it explored the impact of pretask modelling on the collaborative learning opportunities that occurred when 44 Korean middle-school EFL learners carried out three different tasks (dictogloss, decision-making and information-gap). All the participants were female and had four years of previous English instruction in the form of required

classes with a mean of 3.64 hours per week. Half of the learners viewed videotaped models of collaborative interaction before doing the tasks, while the other learners did not receive pretask modelling. Results, analysed in terms of the type and resolution of LREs and the learners' pair dynamics, indicated that learners who received pretask modelling produced significantly more lexical and grammatical LREs and correctly resolved a statistically significant greater proportion of those LREs than learners who did not receive models. They also showed more collaborative pair dynamics than learners who did not receive pretask modelling.

In sum, pretask modelling has proven to be a beneficial technique to help learners generate LREs during collaborative tasks. The other relevant factor mentioned in this last study—pair dynamics—is briefly explained in the following section.

2.4.3. Pair dynamics

Storch's model (2001, 2002a, 2002b) has identified four patterns of pair dynamics: collaborative, expert-novice, dominant-dominant and dominant-passive, which are characterised by varying degrees of mutuality and equality, as illustrated in Figure 2. Mutuality makes reference to the level of engagement between the learners, in which high mutuality would imply reciprocal feedback and idea-sharing. By contrast, equality refers to the degree of contribution and control that each of the participants has over the task, in which high equality would lead to a shared direction of the task in order to complete it. Collaborative pairs show high levels of equality and mutuality, that is, both learners contribute to the task and engage with each other's suggestions. In dominant-dominant pairs, although both members contribute to the task, what distinguishes them from collaborative pairs is their low level of engagement or

mutuality with their pair's contributions, ignoring or rejecting each other's contributions. In dominant-passive pairs, one learner takes control of the task and the other member contributes little. In such pairs, there is little engagement with each other's contribution. Finally, in expert-novice pairs, one participant takes a more leading role in the activity, but unlike the dominant-passive pattern, in this case the dominant participant encourages the so-called 'novice' to contribute to the task.

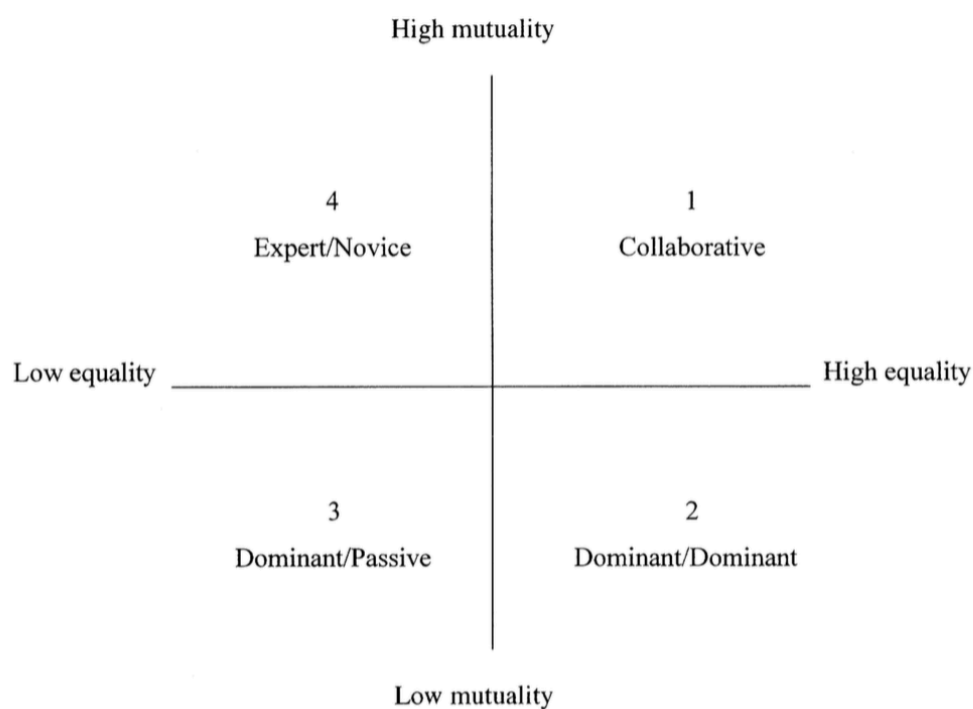


Figure 2. Storch's model of dyadic interaction

As the focus of this study is on mutuality (rather than equality), collaborative and expert-novice pair dynamics have been grouped as 'collaborative', and dominant-dominant and dominant-passive as 'non-collaborative'.

Example (8) illustrates a collaborative pattern of interaction. The participants discuss possible factors which may impact people's health. In lines 62 and 64, Ali

completes Naser's sentences and in line 59, Naser shows his agreement with Ali's statement.

- (8) 58 Ali: do the do the sport
59 Naser: Yes...and swimming and aaa and swimming
60 Ali: walk
61 Naser: swimming and
62 Ali: walked
63 Naser: walkeding the aaa
64 Ali: or do any anything do anything do any sport
65 Naser: do something to help to help us

(Storch & Aldosari, 2013: 38)

Example (9) provides an example of a dominant-passive relationship. Talal, the higher proficiency learner, produces long monologues (turns 1, 3 and 5), whereas Saber's contributions are often limited to single word turns.

- (9) 1 Talal: I think we had to choose the second subject...we can talk about it. Aaa it's about health. Health is very important or people must be concern about health because the had to keep his health good. So, I think there're three things that we have to follow to keep our health...our health good. The first thing. The first thing is kinds of food. Food must be good must be rich of aaa good elements.
2 Saber: Yes

- 3 Talal: Aaa the other thing the second is sport... We have to do sports every day we have to do exercise every day... Third is to keep ourself away from the pollution sources
- 4 Saber: Yes
- 5 Talal: We we'll talk about all of these things... First food we have to take food or to make our food I mean we have to take more than one kind of food every day, specially fruits and aaa we must eat foods every day and drink milk in the morning and I think those are very important for us. Aaa the other thing is the aaa sport we have do the sport every day...aaa walking and playing football and and do any do any kind of sports...aaa.
- 6 Saber: Write?
- 7 Talal: Yes you can write now.

(Storch & Aldosari, 2013: 40)

Example (10) illustrates a dominant-dominant pattern of interaction in which the participants do not show evidence of working together. The most salient characteristics of their non-collaborative pattern of interaction include asking each other questions and leaving them unanswered (turns 5-6), the occurrence of disagreements (turns 8-11), failure to engage in their partner's suggestions (line 2, 19-20) and the inability or unwillingness to reach consensus (turns 25-28).

- (10) 1 S1: I would like to introduce Chuseok to you
- 2 S2: 야... 같이 해... 같이 해... (Hey... Let's do it together... Let's do it together)
- [...]
- 6 S2: biggest가 뭐야? (What does 'biggest' mean?)
- 7 S1: 어떻게 써? A로 써? (How do you spell it? Do I include 'A'?)
- 8 S2: kid있었어. (There was 'kid')
- 9 S1: kids아냐? 어린애들이야. Kids (Isn't it 'kids'? kids [emphasizing the use of plural] ... kids)
- 10 S2: 작은 어린애들이 ... kid (little kids [providing Korean translation] ... kid)
- 11 S1: 아까 저기서 kids라고 했어. (It said 'kids' earlier.)
- [...]
- 19 S2: traditional 어떻게 써? (How do you spell it?)
- 20 S1: American holiday... 미국에서의 휴일은 Thanksgiving이라고
이거 어떻게말해? (How do you say 'America's holiday is
Thanksgiving' in English?)
- [...]
- 25 S2: Thanksgiving day가 추수감사절 아냐? (Isn't Thanksgiving day
'chusugamsajuln; Korean translation'?)
- 26 S1: 그러니까 ... (That's what I am saying.)
- 27 S2: 한국의 추수감사절이 Thanksgiving이랑 같다는 말이야? (So do
you mean that Korean's Chuseok is the same as Thanksgiving?)
- 28 S1: 비슷하다고 ... 넘어가 그냥 ([what I am saying is] similar. Let's
move on.)

(Kim & McDonough, 2011: 191)

Example (11) shows an expert-novice interaction, where one of the participants (Y) is afforded the role of expert and leads the task. Y does not impose his view but rather tries to provide explanations (lines 64, 72-73) and invites E's contributions (line 68).

- (11) 59 Y: the study...the study and small "s"
60 E: yeah investigates
61 Y: investigate-s I think I think...ah...we need to use
62 the ah past tense
63 E: mm...
64 Y: because it the study the study investigated...it happened in the
 past...
65 E: no
66 Y: on...
67 E: sorry
68 Y: what's your opinion?...
69 E: yeah you are right...study was
70 Y: is or
71 E: carried in the past
72 Y: yeah in the first sentence the study tell was carried ah was
73 carried or by the professor
74 E: Hugo... at Adelaide University
75 Y: mm
76 E: the study investigated yeah

(Storch, 2002a: 135-136)

The examples mentioned above have illustrated the similarities and differences among the interactional patterns in pair dynamics. The next section goes further into collaborative interactions and tries to explain the task-type effect on the production of LREs.

2.4.4. Task-modality and its impact on LREs

The impact of task-modality on the occurrence of LRE and their nature has been the subject of recent research, although it is yet to be explored more deeply (García Mayo & Azkarai, in press). Tasks that encourage writing, such as dictogloss or text reconstruction, seem to focus learners' attention on form (Alegria de la Colina & García Mayo, 2007; García Mayo, 2001, 2002a, 2002b; Leeser, 2004; Storch, 1998; Swain, 1998), whereas speaking tasks, such as picture placement/differences appear to be more meaning-oriented and generate more lexical LREs (García Mayo & Azkarai, in press; Kim & McDonough, 2011; Park, 2010; Swain & Lapkin, 2001).

Previous research has suggested that tasks that incorporate a writing component are more likely to provide learners with more language learning opportunities, operationalized as LREs, than speaking tasks (Adams & Ross-Feldman, 2008; Williams, 2008). According to these authors, writing encourages learners to pay attention to both form and meaning in the sense that, once learners know the meaning, they focus on the form of the message.

Ross-Feldman (2007) explored the occurrence and outcome of LREs among ESL dyads of Spanish participants in three different collaborative tasks: picture placement, picture differences and a picture story task. She reported that these learners initiated and resolved more LREs in the picture story task, which included a writing component, than in the other two tasks with an oral component only. Adams

and Ross-Feldman (2008) analysed the production of LREs by ESL learners with different L1s while they carried out several collaborative writing and speaking tasks. The two target forms were locative prepositions and past tense morphology. The results showed that the majority of LREs in both tasks focused on form and that their participants produced more LREs in the writing tasks than in speaking, although the differences were not statistically significant.

In an EFL context, Azkarai and García Mayo (2012) examined the occurrence and outcome of the LREs produced by 12 EFL Basque-Spanish learners when they worked in pairs on four collaborative tasks: picture placement, picture differences, a picture story and a dictogloss. The results indicated that these learners generated more LREs in the picture story and the dictogloss, which required them to produce a written text, than in the other two tasks, which only required them to interact orally. More recently, García Mayo and Azkarai (in press) analysed the impact of task modality on the LREs' production and outcome but also on the level of engagement in the oral interaction of 44 Basque-Spanish EFL learners while completing four communicative tasks: dictogloss, text editing, picture placement and picture differences. Once again, the findings showed that the tasks with a writing component (dictogloss and text editing) led to a higher production and resolution of LREs than the tasks with an oral component (picture placement and picture differences), whereas students' level of engagement was less affected by task modality.

3. The present study

As mentioned above, previous studies have supported the effectiveness of pretask activities before carrying out collaborative tasks in the ESL and EFL classrooms. However, there is still little research on the effect of pretask modelling on the

production of LREs during collaborative tasks in the EFL classroom and more investigation on whether pretask modelling promotes collaborative pair dynamics is also needed, since collaborative tasks have been claimed to promote learning opportunities and outcomes.

The present study, inspired by Kim and McDonough (2011), focuses on these two aspects: the impact of pretask modelling on the production of LREs during collaborative pair work and on collaborative pair dynamics (Storch, 2001, 2002a, 2002b). However, the current study takes a step further and adds a third element not included in Kim and McDonough's study: the impact of task modality on learners' production of LREs while doing collaborative work.

3.1. Research questions and hypotheses

Taking into account the literature reviewed above, the research questions addressed in this study are the following:

- 1) Does pretask modelling encourage the production of LREs during collaborative tasks?
- 2) Does pretask modelling promote collaborative pair dynamics?
- 3) Does task-modality affect the production and outcome of LREs during collaborative pair work?

Based on previous research on these topics, we entertain the following hypotheses:

- Hypothesis 1: learners who receive pretask modelling will produce (and correctly resolve) more LREs than those who do not receive any models (Kim & McDonough, 2011).

- Hypothesis 2: even though there is little research on this topic (Kim & McDonough, 2011), we hypothesised that pretask modelling would favour collaboration in pair dynamics.

- Hypothesis 3: the dictogloss task will lead to produce and correctly solve the highest number of LREs, focusing learners' attention on form (Adams & Ross-Feldman, 2008; Azkarai & García Mayo, 2012; García Mayo 2001, 2002a, 2002b; Ross-Feldman, 2007) and the picture differences task, on the contrary, will lead to a greater production of lexis-based LREs (García Mayo & Azkarai, in press; Kim & McDonough, 2011; Park, 2010; Swain & Lapkin, 2001).

3.2. *Participants*

Students from two parallel EFL classes who were completing their third year of secondary education (3° ESO) in the same school and who were taught by the same teacher were invited to participate in the study. The invitation and explanations about the study were given in Spanish by the researcher. As the selected groups were both formed by underage students, their parents were provided with a consent form in which they were informed that the study aimed to investigate learners' English performance and which they had to sign in order to grant permission (Appendix 1).

Besides, all of the students were asked to fill in a language background questionnaire (Appendix 2). Out of a total of 39 students, 30 participated in this study (n=30), since 9 of them did not meet the linguistic requirements needed for this study: Spanish-Basque bilingual, with at least 8 years of English exposure and without any English native relative or close friend. The questionnaire revealed that the participants' average age was 14 (range 14-16), that their use of English outside the

class for communicative purposes was infrequent and they had a limited exposure to it through media (television, music, etc.)

The learners were administered a standardized test, the Quick Oxford Placement Test (OPT) (Syndicate, U.C.L.E. 2001) as a part of the pre-test, in order to assess their English proficiency level. The participants' level ranged from beginner to lower intermediate, however most learners (21 out of 30) turned out to be elementary.

Table 1 provides a more detailed description of the participants' profile:

		Age	Exposure to English (years)	English proficiency		
				Beginner	Elementary	Lower intermediate
Experimental group (n= 16)	Average	14	8	2	12	2
	Mean	14.63	8.63			
	Range	14-16	8-10			
Control group (n= 14)	Average	14	8	1	9	4
	Mean	14.79	8.79			
	Range	14-16	8-10			

Table 1. Description of participants' profile

Initially, this study aimed to replicate Kim and McDonough's (2011) methodology, but we encountered several difficulties. First of all, in the Basque Autonomous Community (BAC), female-only classes are a rarity and, although we could have selected only females out of a mixed group in order to analyse their

performance, the final number of participants meeting the profile for this study would have been low. Besides, it would not have been ecologically valid. Taking into account that the students' similarity in class methodology was vital for us, preferably having the same teacher who used common materials with several groups, it could have been very difficult—if not impossible—to find enough students to replicate the conditions in Kim and McDonough's study.

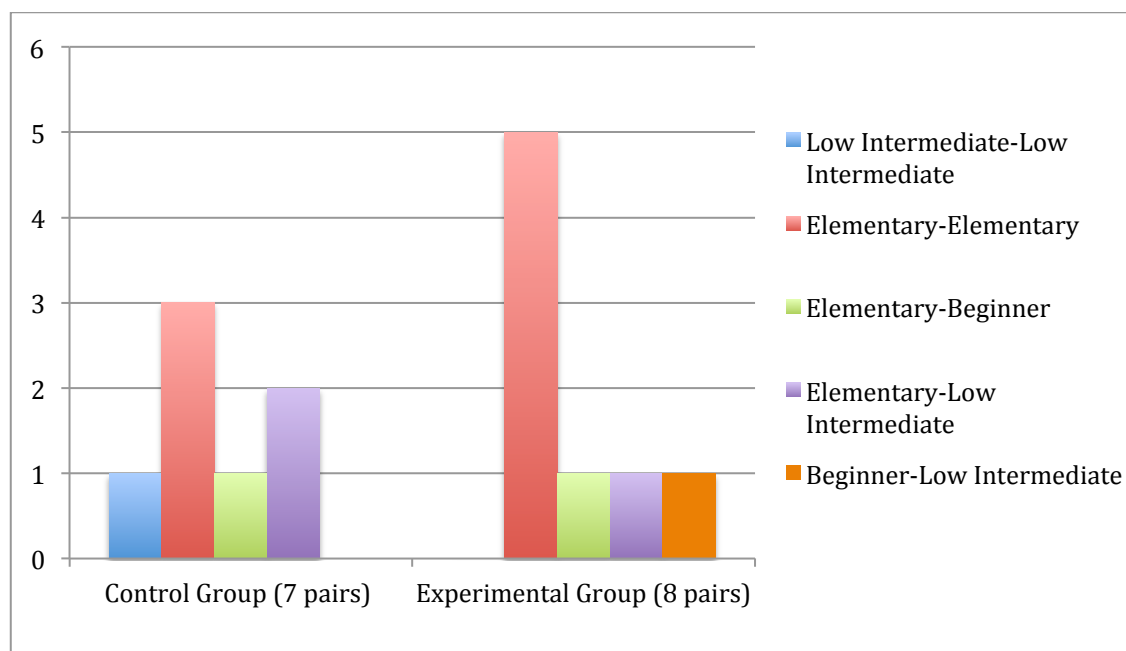
The second problem was that, unlike in Korea where students start taking EFL classes at the age of 9-10, here in the BAC students are exposed to a foreign language at an earlier age (around 6-7). Therefore, the only solution that occurred to us was to equate the amount of hours of English received in both contexts (in Korea and in the BAC). Since the Korean participants attended extra English lessons in their free time, they received a mean of 3.64 hours per week (3.37 hours/week in group 1 and 3.91 hours/week in group 2)¹. Assuming that an academic year has 40 school weeks, the Korean students would have received around 582 hours of English in their four years of English instruction. In order to have a similar amount of hours of English, we needed a group of Spanish-Basque students with a minimum mean of 7.28 years of English instruction in the form of required classes at school, since in the school chosen for this study EFL classes were taught 2 hours per week. For practical reasons, we chose third-year students of obligatory education (3° ESO), who in theory should have received 8 years of English. It could have been easier to compare the participants' proficiency level in both studies, but Kim and McDonough did not provide this information.

The participants in the present study—15 males and 15 females—worked in 15 self-selected pairs (6 female-female dyads, 3 male-female pairs and 6 male-male

¹ See Kim and McDonough's (2011) study for a more detailed description of their methodology

pairs; see Table 1) and all of them completed two collaborative tasks. The textbook used in their required English course was organised by different topics, and each unit presented different target grammatical features, functional expressions and vocabulary (Appendix 3).

Graph 1 illustrates the distribution of proficiency levels in both the control (7 pairs) and experimental (8 pairs) groups. Initially, pairs were going to be set up by two participants of the same proficiency level (matched-proficiency pairs), but most of them were elementary learners in both groups, as Graph 1 shows. Therefore, mixed-proficiency pairs were needed, since there were not enough participants with other proficiency level than elementary in order to render the statistical comparison valid.



Graph 1. Proficiency level of participants in pairs

Originally, pairs were going to be selected by the instructor, but recent studies have suggested that the student-selected method may be more beneficial in terms of

group dynamics (Bacon, Stewart & Silver, 1999; Hassaskhah & Mozaffari, 2015; Hilton & Philips, 2008; Russell, 2010) and outcome (Mahenthiran & Rouse, 2000; Mushtaq, Murteza, Rashid & Khalid, 2012). These studies have also indicated that whenever students are given a choice, they prefer to work with friends with whom they feel more relaxed.

3.3. *Materials*

3.3.1. *Communicative tasks*

The materials used in this study were two collaborative tasks: picture differences and dictogloss (Appendix 4), which we will now describe briefly.

Picture differences: this is an information gap task in which each participant has part of the necessary information and must exchange it in order to perform the task. The learners have to spot the differences in their pictures by telling their partner about the objects in it. It is a task intended to engage learners in a meaning-focused use of the target language, promoting the production of lexis-based LREs and providing them with opportunities for vocabulary learning (Azkarai & García Mayo, 2012; García Mayo & Azkarai, in press; Ross-Feldman, 2007; Swain & Lapkin, 2001). Each member of the pair looks only at the picture that s/he or she holds. Then, they exchange information to find out the differences between the pictures that each of them has.

Dictogloss: this task (Wajnryb, 1990) consists of two different parts. First, a short text is read twice. The first time, the participants just listen attentively to the researcher reading the text at a normal speed. The second time, the researcher reduces her reading speed in order to let participants take notes about the most relevant facts

in the story, which will help them recall the whole passage. Then, the two members of the pair share their notes to reconstruct the text and rewrite it altogether.

This task has been shown to promote collaboration between both members of the pair (Swain, 1998; Swain & Lapkin, 2001), activate the cognitive processes necessary for the acquisition of an L2 and refine their understanding of the language used by drawing learners' attention to form (Alegría de la Colina & García Mayo, 2007; Basterrechea & García Mayo, 2013), that is, to encourage the production of form-related LREs. Nonetheless, other studies have not obtained such positive findings which may be attributed to the oral nature of the stimulus, lack of familiarity with the task, and students' attempts to produce complex structures taken from the text (García Mayo, 2001, 2002a, 2002b). According to Alegría de la Colina and García Mayo (2007), another factor could be the choice of the text. The texts by Wajnryb (1990), used in some of the studies cited, are quite difficult to retain because their different parts are loosely connected (*episodic nature*). Therefore, unless rather detailed information is written down, it would be very complicated for EFL students to reconstruct the passage. It was hypothesised that better results may be obtained though, if a short text with a clear structure was used and students were familiarised with the task and the topic.

Thus, both tasks differed in terms of their outcome and focus, since the picture differences task (speaking task) needed just the production of oral output, whereas the dictogloss (writing task) required the production of both oral and written output.

The participants in Kim and McDonough's (2011) study carried out three different activities: one writing task (dictogloss) and two oral tasks (decision-making and information gap). However, due to time constraints in the participants' school, the number of tasks in the present study has been limited to two. Dictogloss (Wajnryb,

1990) has been maintained due its reported benefits in terms of LRE production and outcome in the literature mentioned above; whereas, the aforementioned two oral tasks have been replaced by a picture difference task, another common oral activity in pair work research, which has been shown to be effective as well.

Both writing and speaking tasks were taken and adapted from the New English File Beginner, Elementary and Pre-Intermediate Text Books (Oxenden, Latham-Koenig & Seligson 2009a, 2009b, 2012) after making sure that participants knew the vocabulary used in these activities, so that the lexical difficulties would be kept to a minimum. For that purpose, the researcher checked the materials provided by the teacher in Appendix 3 and chose a topic the participants were familiar with (*house parts*). Besides, in order to compare the impact of the two activities on the amount and nature of the LREs that the learners generate, both activities were designed with a common content (Swain & Lapkin, 2001).

Table 2 describes the average time in minutes needed to complete each task. It shows that although there is no big difference between the two tasks in terms of the amount of time devoted to each, the range is much broader in the dictogloss task.

	Picture Differences	Dictogloss
Mean	06:15 min	08:22 min
Range	03:45-11:44 min	02:16-26:36 min

Table 2. Time devoted by participants in each task

Nevertheless, if we make a more detailed analysis of the amount of time the participants employed to complete both tasks (see Appendix 5), we realise that it is pair 8 and pair 9 in the experimental group who take much longer than the rest to

carry out the dictogloss task (24:09 min and 26:36 min, respectively). If we ignored these two results, in other words, if we considered them outliers the mean length of the dictogloss task would be 05:50 min with a range of 02:16-11:39 min, which would make the picture difference and the dictogloss tasks fully comparable in terms of time needed to carry out each of them. As in Kim and McDonough (2011), both tasks were untimed.

3.3.2 Pretask modelling activities

As for the pretask modelling materials, two short video clips (approximately five minutes each) were created in which the researcher (R) and the students' English teacher (T) carried out each task. The scripts were prepared by the researcher and rehearsed prior to the recording in order to ensure that each task model had all the necessary features. These features needed to include examples of correctly solved LREs targeting both vocabulary and grammar and demonstrate how collaborative pair dynamics works with both interlocutors providing feedback, answering questions and sharing ideas. Appendix 7 provides an example of pretask modelling and Examples (12) and (13), extracts of this pretask model for the picture differences task, illustrate some of the above-mentioned features:

(12) 7 T: Well, in my picture, there are two people...and they are in the park. The girl is speaking on the phone.

8 R: Ah alright...so...OK...they are in the park. In mine, they are not in the park, they are in an office and the girl...she is not talking by the phone...she is just sitting on a chair.

- 9 T: On a chair? Uhhh...in mine they are not sitting on a chair or a bench, they are sitting in a... wall.
- 10 R: They are sitting... on a wall
- 11 T: Oh yeah, of course...they are sitting on a wall, yes... and the girl is wearing a white T-shirt and a striped sweater.

This example above illustrates different types of feedback such as confirmation (turn 9), in which the researcher is checking if her understanding of the teacher's statement is correct, a recast (turn 10) in order to correct teacher's previous sentence implicitly and a form-focused LRE (turns 10 and 11).

- (13) 15 T: Then in my picture...a boy appears too in my picture and he is wearing a long...short-sleeved T-shirt...
- 16 R: OK...there is a guy in my picture too...he is wearing a...how do you say *a cuadros* (checked)?
- 17 T: It is...ehhhh...checked.
- 18 R: Ahh yes, thank you, he is wearing a checked T-shirt.

Example (13) illustrates an explicit discussion of a language form, but in this case of a lexis-based one (turn 16).

In short, pretask modelling videos showed how to carry out the tasks collaboratively and how to resolve linguistic questions and problems in a successful manner.

3.4. *Design and procedure*

As mentioned above, before the experiment, participants completed a questionnaire with relevant information about their linguistic background. They also filled the OPT to assess their proficiency in English.

One class was randomly assigned to the pretask modelling group while the other class was assigned to the control group, which did not receive explicit instructions about how to carry out the tasks and did not view the videotaped models of collaborative task performance. Instructions of the tasks were given in English and if further clarification was needed, the L1 was used to avoid any misunderstanding. Students were allowed to use their L1 during task performance as in Kim and McDonough's study it was also permitted. The participants in the current study completed the two collaborative tasks in their self-selected pairs over a one-week period. In pairs, students were asked to leave the room in which they were having class at the moment, since data were collected in a separate classroom to minimise the effects of noise interference. All pair talk was video-recorded.

Each task was carried out without a time limit and it consisted in some short pretask activity and the main task. For the modelling group, the pretask activity had some explicit instructions about how to interact with a partner showed in a videotaped model of the researcher and the teacher carrying out the same task. As previously illustrated in Examples (12) and (13), the interaction depicted in the video included multiple instances of both interlocutors initiating discussions of language form, requests for information and feedback episodes. For the control group, the pretask activities consisted of instructions about the purpose of the task, without any explicit instructions about how to interact with their partners.

As explained in the previous section, the main tasks were two for both groups: a picture differences task and a dictogloss. In order to carry out the first task, each participant was given one of a pair of pictures (see Appendix 4). In this experiment, it was very important that the participants did not look at their partner's picture and the researcher warned them against it. The second activity—the dictogloss (Wajnryb, 1990)—took place immediately after the first task. Students needed a piece of paper and a pen to jot down the most relevant facts from the story. In this task, participants were reminded to just listen the first time that the text was read and to write down the important words in the second reading.

4. Data analysis and codification

4.1. Language-related episodes

All recorded oral interactions, a total of 3 hours and 40 min, were transcribed and coded for LREs. Examples of these transcriptions can be found in Appendix 6. Also, the total number of turns and LREs in each task were tallied. A turn began when one of the learners started talking and finished when his/her partner began a new utterance. An LRE started when a learner raised a question about language and ended when they moved on to a new topic or resolve their linguistic concern. If participants discussed the same problem throughout the interaction, this counted as one LRE. Besides, each LRE dealt with one linguistic item, if students referred to more than one linguistic feature in the same segment, they were counted separately.

The nature of LREs was coded on the basis of form and meaning-focused LREs and the outcome of LREs on the basis of correctly resolved, unresolved or incorrectly resolved. Form-based LREs were subclassified into linguistic categories including spelling, phonetics, morphology or syntax, following the taxonomy adopted

by Alegría de la Colina and García Mayo (2007), among others (see Figure 1 in section 2.4). The length of the LREs was also taken into consideration and it was operationalized as the number of turns.

A subset of the data (20%) was coded by an independent rater who identified and classified LREs according to the linguistic focus (grammar or vocabulary), outcome (correctly resolved, unresolved and incorrectly resolved) and pair dynamics (collaborative and non-collaborative patterns). An interrater reliability analysis using the Kappa statistic was performed to determine consistency among raters. Cohen's kappa was 1.0 for the classification of LREs, and .98 for the resolution of LREs, which means a 100% and a 98% of consistency, respectively, between the raters. For pair dynamics, the agreement between the researcher's coding and the independent rater's coding was 98% (Cohen's kappa= .98).

Example (14), taken from the current database as all the others to follow, shows a correctly solved form-focused LRE dealing with spelling. The two students are working on the dictogloss task and student EGS1² asks student EGS2 about the spelling of Polish. Finally, in turn 7, the correct answer is given.

- (14) 1 EGS1: *No, eso es hablar sobre* (no, that is to talk about)... English
 or... *Ahora lo importante...* (now the important thing)
 ¿*Cómo se escribe polaco?* (how do you write Polish?)
 Polash?
- 2 EGS2: *Que no...polaco...no* (it is not Polish...no...)

² The code EGS1 stands for 'experimental group student 1'. Similarly, CGS1 stands for 'control group student 1'. This type of coding has been used throughout this study.

- 3 EGS1: *Que sí...que habla polaco...* (yes, it is...(she) speaks Polish)
Espera que lo tengo apuntado (Wait, I have it written down)
 Polish
- 4 EGS2: Polish?
- 5 EGS1: Polish *o* (or) Polash
- 6 EGS2: Police
y lo que has puesto tú es (what you've written down is) Polish
- 7 EGS1: *Que sí hazme caso...* (Believe me)
 Police *es policía* (means police)
 Polish *es polaco* (means Polish), *es* (it is) Polish...
 English or Polish with other students

Example (15), presents a form-focused LRE, which is focused on pronunciation. Although CGS12 means coke /kəʊk/ when she says /koke/, neither she nor CGS11 are able to come up with the correct word form and she has to provide her partner the Spanish meaning in order to be understood (turn 5). Therefore, this LRE is incorrectly solved.

- (15) 1 CGS12: Yes, first she says that there were four cans of coke /koke/
 2 CGS11: Four cans of...
 3 CGS12: Of coke /koke/
 4 CGS11: Coke? /koke/?
 5 CGS12: Coke.../koke/ coke.../koke/ *Coca-cola* (coke)

Example (16) illustrates a lexical LRE that is left unresolved. While completing the picture differences task, student EGS14 asks her partner how to say the word ‘magazine’ in English (turn 1), but student EGS13 does not know it (turn 4). Therefore, the LRE remains unresolved.

- (16) 1 EGS14: How do you say *revista*?
- 2 EGS13: Ehmm
- 3 EGS14: *Revista?*
- 4 EGS13: *Sí, hay una revista en inglés que se llama ‘Revista’*
(Yeah, there’s a magazine in English called ‘Revista’)
but I don’t know...

Example (17) illustrates an incorrectly resolved lexical LRE. The two students are carrying out the picture differences task and student EGS15 is looking for the preposition ‘on’ in English. In turn 2, student EGS16 provides the word ‘over’, which his partner accepts, but which is not correct.

- (17) 1 EGS15: My picture have got...four...four pictures
Have got...*encima*...(on)
¿cómo se dice encima? (how do you say on in English?)
- 2 EGS16: Eh...over?
- 3 EGS15: *Eh?*
- 4 EGS16: Over *¿no?* (doesn’t it?)
- 5 EGS15: Over the bed

Finally, in Example (18), CGS11 asks her partner how to say the verb '*dejar*' (leave, put) in English (turn 1). CGS12 provides her with a list of possible synonyms (turn 2) that she narrows down to the verb 'put' (turn 5). This example, then, illustrates a correctly solved lexis-based LRE.

- (18) 1 CGS11: ¿*dejar*? (Leave?)
- 2 CGS12: Put...take...leave...
- 3 CGS11: *dejar ahí encima* (to leave on there)
- 4 CGS12: Put the...put her laptop...*dejar encima de la cama?*
 (to leave it on the bed?)
- 5 CGS11: Left *es dejar así* (is to leave it like this)
 como descuidado (carelessly)...put the laptop on the bed and
 the case...her case, her case on the chair...

In sum, the examples above illustrate some of the possible LRE types that learners could generate when doing collaborative tasks. In the next section, we will analyse learners' interactional patterns with regard to pair dynamics.

4.2. *Pair dynamics*

The transcripts were also analysed in terms of pair dynamics following Storch's framework (2001, 2002a, 2002b). Because students may show variation in their interactional patterns depending on the type of task, pair dynamics were coded separately for each task. As described previously (see *pair dynamics* in section 2.4.3), mutuality has been considered the key factor in this study for identifying different levels of collaboration.

However, as Storch acknowledged, the categorisation of pair dynamics can be imprecise because multiple patterns may emerge during a conversation. Thus, if students changed their interaction pattern during a single task performance, the predominant pattern in their conversation was identified.

The following two examples (Examples (19) and (20)) illustrate collaborative and non-collaborative patterns of interaction, which took place when different pairs carried out the dictogloss task. In Example (19) both learners contributed to the re-elaboration of the story. They scaffolded each other's ideas (turns 2-6, 10-11, 22-23) and provided implicit feedback such as recasts (turn 12) and repetitions (turn 13).

- (19) 1 CGS4: Joanna...
- 2 CGS3: Joanna is a girl from Poland
- 3 CGS4: Joanna is a girl from Poland and
- 4 CGS3: And in September she went to
- 5 CGS4: To...in September she... ehh...wrote her experience in a
Erasmus in Roma
- 6 CGS3: Yes...uhmm
[...]
- 10 CGS3: and the next morning she bought a map
- 11 CGSS4: Ahh...yes...they bought a map of...in the morning they bought
a map of...Roma
- 12 CGS3: of Rome...
- 13 CGS4: of Rome...
[...]

- 22 CGS3: *ah sí, si está aquí* (ah yes, it's here)...inside the wardrobe no?
- 23 CGS4: Yeah, and she didn't like the...I don't know...
- 24 CGS3: The organis...organization...uhmmm

In contrast, Example (20) presents a non-collaborative pattern (dominant-dominant) in which learners did not show evidence of working together. Both students asked questions that either went unresolved (turns 21-24) or ignored (turns 18-19), or failed to engage in their partner's suggestions (turns 68-70).

- (20) 18 EGS4: *¿Rentar?* (to rent?)
- 19 EGS3: She go to the hotel and...
- 20 EGS4: *En pasado...*(past tense) she went
- 21 EGS3: *¿Cómo era coger?* (How do you say to take/catch?)
- 22 EGS4: Uhhh catch...*coger qué* (catch what?)
- 23 EGS3: *Cogió un Aquarius y miró en un mapa y se fue a la Universidad*
(She fetched an Aquarius and looked in a map and went to university)
- 24 EGS4: Browse in the map...*sigue, sigue...bueno...* (go on...go on... well)... brows...browse
[...]
- 68 EGS4: *¿Cómo era la habitación? La descripción*
(How was the bedroom? The description)
- 69 EGS3: *Lo del ordenador y eso* (About the PC and all that)
- 70 EGS4: *Sí...A ver vamos a poner otra frase...*(Yeah...let's write another sentence...) She...*¿venir?* (to come?)

The examples presented above show the two opposite interactional patterns (collaborative and non-collaborative) considered in terms of pair dynamics in which learners could behave when doing collaborative tasks.

5. Results and discussion

This section presents the results of this study in order to answer the research questions that have been previously entertained. We will first present the results in terms of production of LREs (both nature and outcome); secondly, we will explain the interactional patterns found in our results in terms of pair dynamics, and finally, we will analyse the effect of task modality in the production of LREs.

5.1. Occurrence of LREs

The first research question addressed whether pretask modelling encouraged the production of LREs during collaborative tasks. In order to answer this question, the oral interactions between the participants in the control and experimental groups were analysed while carrying out the picture differences and the dictogloss tasks. Both lexical and grammatical LREs were compared by taking frequency, resolution and type of task into consideration. Table 3 features the number of lexis and form-based LREs that occurred in the control and experimental groups for each of the two tasks.

	CONTROL GROUP (n=14)				EXPERIMENTAL GROUP (n=16)			
	LEXIS		FORM		LEXIS		FORM	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Picture Differences	2.28	1.38	0.14	0.38	6.63	4.03	0.5	1.07
Dictogloss	1.14	1.21	3.43	3.87	3.38	3.70	7.88	6.92
TOTAL	1.71	1.38	1.79	3.14	5	3.97	4.19	6.11

Table 3. Frequency of LREs by task and group

In terms of the total number of LREs, the experimental group—which received pretask modelling—produced a greater number of both grammatical and lexical LREs than the control group. Across tasks, the experimental group had a mean of 5 lexical and 4.19 grammatical LREs, whereas the control group generated a mean of 1.71 lexical and 1.79 grammatical LREs.

In order to test for statistical significance, the total numbers of lexis and form-based LREs across tasks were compared using Mann-Whitney U tests (non-parametric independent samples *t*-tests). The results indicated that there was no statistically significant difference between the amount of grammatical LREs produced by the experimental and control groups ($Z = -0.961, p = .347$), whereas in the case of lexical LREs, by contrast, the difference was significant ($Z = -2.047, p = .044$).

Nevertheless, it should be pointed out that variation occurred not only between groups, but also among pairs inside each group. For example, in the control group one

pair produced only one lexical LRE and one grammatical LRE while another produced 8 lexical and 12 grammatical LREs. The same goes for the experimental group; again one pair produced only one lexical LRE and one grammatical LRE while another pair generated up to 21 lexical and 16 grammatical LREs. This remarkable variation was not mentioned by Kim and McDonough (2011), but it has been noted by Storch (2001) and Watanabe and Swain (2007). These authors claim that even if participants are familiar with each other, this does not mean that all of them have to collaborate with each other in the same way. Some pairs, also in the present study, are found to be more collaborative and, consequently, generate more LREs than others.

The first research question was also addressed by comparing how learners in the experimental and control groups resolved their LREs. The results, illustrated in Tables 4 and 5, show that the experimental group was more successful at solving LREs in both the picture differences and the dictogloss tasks than the control group on the basis of the total amount of LREs. On average, each pair of the experimental group resolved 3.75 LREs in the picture differences task and 9.86 LREs in the dictogloss while each pair in the control group solved 1.29 LREs in the picture differences task and 3.85 in the dictogloss. The findings have to be interpreted with caution because even though the difference between the experimental and control groups is statistically significant for the amount of correctly resolved LREs in the picture differences task ($Z = -1.961, p = .048$), the difference is not significant in the case of the dictogloss task ($Z = -1.799, p = .078$). In fact, percentages of correctly resolved LREs reflect an opposite trend, which indicates that the control group had more correctly resolved LREs (75.51%) than the experimental group (72.26%). However, it must be noted that the total amount of LREs generated in the control group is much lower ($n = 49$) than in the experimental group ($n = 137$), which is a

statistically significant difference confirmed by the Mann-Whitney U test ($Z = -2.168$, $p = .030$). Therefore, the data confirm Hypothesis 1, which predicted that learners receiving pretask modelling would produce and correctly resolve more LREs than those who did not receive any treatment.

CONTROL GROUP								
	Picture Diff.	M	SD	Dictogl.	M	SD	TOTAL	%
CORRECT	9	1.29	1.25	28	3.85	4.30	37/49	75.51
INCORRECT	1	0.14	0.38	2	0.29	0.49	3/49	6.12
UNRESOLVED	7	1	0.82	2	0.29	0.49	9/49	18.37

Table 4. Outcome of LREs by task for the control group

EXPERIMENTAL GROUP								
	Picture Diff.	M	SD	Dictogl.	M	SD	TOTAL	%
CORRECT	30	3.75	3.96	69	9.86	8.76	99/137	72.26
INCORRECT	5	0.63	0.74	4	0.5	0.76	9/137	6.57
UNRESOLVED	22	2.75	0.83	7	0.88	1.36	29/137	21.17

Table 5. Outcome of LREs by task for the experimental group

As shown in Tables 4 and 5, the percentage of incorrectly solved LREs was very similar for both groups (6.12% and 6.57%, respectively). Nonetheless, the picture is slightly different for unresolved LREs. Whereas the control group left 18.37% of their episodes unresolved, the experimental group did not solve 21.17% of their LREs. In the case of the control group, they left unresolved an average of 1 episode per pair in the picture differences task and 2 in the dictogloss. On the other hand, the experimental group did not solve an average of 2.75 episodes in the picture

differences task and 0.88 in the dictogloss. The Mann-Whitney U test confirmed that this difference was not statistically significant in the dictogloss ($Z = -.969, p = .348$), but it was in the case of the picture differences task ($Z = -2.066, p = .042$).

From a sociocultural perspective, an assisted activity could lead to a higher level of attainment than a person or a pair/group of people working on their own. In the current study, incorporating assistance could be applied to the pretask model video in which participants' English teacher and the researcher show some of them how to interact in the two collaborative tasks. The analysis of the outcome of the LREs supports this stance, even though it must be said that in the case of the dictogloss task a statistically significant difference cannot be confirmed. Examples (21) and (22) compare two different extracts of the dictogloss task. The first extract, shown in Example (21), belongs to the collaborative interaction of a pair in the control group; whereas, Example (22) illustrates the interaction of a pair in the experimental group.

- (21) 1 CGS9: Joana is a one girl from Poland...
- 2 CGS10: In the morning
- 3 CGS9: In the morning in hers bedroom she...¿see *en pasado*?
(the past tense of see?)
- 4 CGS10: Saw...she saw...(long pause) in the chair TV
- 5 CGS9: No, *yo tengo* (no, I have) TV on the table, two pillows...clock
in the bed, 2 books...
- 6 CGS10: *Y luego habla de que se va a clase y eso...* (and then she talks
about going to class and that)
- 7 CGS9: She little Italian school...*hemos dicho que iba ¿no?* (we've
said that she went, haven't we?)

- 8 CGS10: *Sí...*(Yeah)
- 9 CGS9: *Go en pasado?* (the past tense of go?)
- 10 CGS10: *Pues...*(well...) went
- 11 CGS9: She little Italian school went but she understand people of Italian class
- (22) 15 EGS8: But in the morning...?
- 16 EGS7: She gone
- 17 EGS8: to university in Rome?
- 18 EGS7: Yes...in the room were...ehmm...
- 19 EGS8: In the table are TV
- 20 EGS7: Yes, TV, books and a clock behind the...bed
- 21 EGS8: Was...a TV, two books and a clock behind the bed...behind *con h* (with h)
- 22 EGS7: But she doesn't like it...*ponle los puntos también...*(write full stops too) and she change it...she *no* (not) he
- 23 EGS8: She drunk all the coke...coke no cook and she put a lamp...and remove the books...remove /remove/
- 24 EGS7: To a table
- 25 EGS8: To another table
- 26 EGS7: She put /pæt/ the laptop computer in the bed
- 27 EGS8: Yes...put ¿*no?* (doesn't it?) *con u* (with u) /pɒt/
- 28 EGS7: Yes
- [...]

- 33 EGS7: No, but she talked little Italian
- 34 EGS8: She little talk Italian
- 35 EGS7: She talked little Italian
- 36 EGS8: She talked...?
- 37 EGS7: Little l-i-t-t-l-e Italian...but when she was in Roma

Comparing Example (21) to Example (22), we can appreciate that in the former, students interaction is much shorter and less ‘smooth’, they just limit themselves to produce sentences, which seem disjointed in some occasions (see turns 1-2, turns 5-6). In Example (22), students’ dialogue has a higher number of turns and is more connected (turns 15-20), including remarks about spelling (turns 21, 22 and 37) and pronunciation (turn 27), and even helping each other finish their sentences (turns 16-17), which is an example of *scaffolding*.

5.2. *Pair dynamics*

The second research question in the present study asked whether pretask modelling promoted collaborative pair dynamics. As described previously, mutuality was considered the main factor to identify different levels of collaboration. Based on Storch’s model of dyadic interaction (2002a: 128), the criteria for collaborative pair dynamics were the following:

1. Offering consistent interactional feedback throughout task performance;
2. Engaging in each other’s ideas;
3. Maintaining similar contributions to task accomplishment;
4. Encouraging a partner’s participation

Examples (23) and (24) illustrate collaborative and non-collaborative patterns of interaction that took place when different pairs carried out the dictogloss task. In Example (23), both learners contributed to the reconstruction of the text in the dictogloss task and were engaged in each other's ideas or suggestions, including several instances of implicit feedback, such as recasts (turn 12), and completing and making suggestions to each other's ideas (turns 3-4, 7-8, 16-17) in order to complete the task. Therefore, this example shows a collaborative pattern of interaction.

- (23) 1 CGS4: Joanna...
- 2 CGS3: Joanna is a girl from Poland
- 3 CGS4: Joanna is a girl from Poland and
- 4 CGS3: And in September she went to
- 5 CGS4: To...in September she... ehh...wrote her experience in a
Erasmus in Roma
- 6 CGS3: Yes...uhmm
- 7 CGS4: The first night...
- 8 CGS3: She was in the hotel
- 9 CGS4: in the hotel and...uhmm
- 10 CGS3: and the next morning she bought a map
- 11 CGS4: Ahh..yes...they bought a map of...in the morning they bought
a map of...Roma
- 12 CGS3: of Rome...
- [...]

- 16 CGS3: a TV...
- 17 CGS4: remote
- 18 CGS3: Yeah
- 19 CGS4: a TV remote on the table and two books on the... bedside
table...and...a clock on the bed?

By contrast, Example (24) illustrates a non-collaborative pattern of interaction (dominant-passive), where learners do not seem to be working together to complete the dictogloss task. They do not help each other complete the activity because, in this case, EGS9 tries to impose his opinion on the activity's procedure (turns 5 and 7), he ignores his partners' ideas or comments (turns 3 and 6) and most of his turns are longer than his partner's (turns 1 and 7).

- (24) 1 EGS9: Joanna is a girl of Poland and the last September write an
Erasmus website...in their night return on hotel and in the
morning in the...in the...
- 2 EGS10: In the bedroom
- 3 EGS9: Walked...¿qué hacía primero? (What did she do first?)
- 4 EGS10: Eh...¿cómo? (Pardon?)
- 5 EGS9: *A ver, te he dicho que apuntes* (I've told you to write down)
- 6 EGS10: *He apuntado* every morning *y tú no, eso no* (I've written down
every morning and you haven't, not that)

- 7 EGS9: *Bueno pues lo digo yo* (well, I say it then...) the TV in the table, the clock in the bed, this is in the room, in the chair are a TV remote and her drunk a cook, lamp is in the table and the keys on the chair. Every morning go to the classes in the university and he speak Italian in the class and he speak very well English
- 8 EGS10: *Eh...A ver yo he entendido que se llamaba Joana que era de Pauland o como sea, de Polonia y estudia o algo así...* (Uhhh...I've understood that her name was Joana, she was from Pauland or whatever, from Poland and that she studies or something like that) She's on Erasmus *y a partir de ahí ya...* (and from that point on...)
- 9 EGS9: *Y que ha vuelto en septiembre* (And she's come back in September)
- 10 EGS10: *¿Que acabó en septiembre?* (What did she finish in September?)
- 11 EGS9: *Que fue en septiembre cuando acabó la historia* (It was in September when the story finished)

As illustrated in Table 6, the learners in the experimental group had more collaborative interactions than students in the control group in both picture differences and dictogloss tasks. The students in the experimental group engaged more frequently in their partners' ideas or share their own opinion, encouraged more their partner's participation and tried to offer more feedback. For the picture differences, five pairs out of eight in the experimental group showed collaborative interaction while only

three pairs out of seven in the control group demonstrated collaborative pair dynamics. For the dictogloss task, there was a similar increase in collaborative interaction, with six collaborative pairs in the experimental group and four in the control group.

	CONTROL GROUP		EXPERIMENTAL GROUP	
	Collaborative	Non-collaborative	Collaborative	Non-collaborative
Picture Differences	3	4	5	3
Dictogloss	4	3	6	2

Table 6. Pair dynamics by group

Therefore, Table 6 indicates that students who received pretask modelling showed more collaborative interaction than those in the control group. The differences between the two groups were as noticeable for the dictogloss as for the picture differences task. The results seem to support Hypothesis 2, which conjectured that pretask modelling would favour collaboration in pair dynamics. However, due to violations of between-cell and within-cell independence, it was impossible to calculate whether the relationship between pretask modelling and pair dynamics was significant.

5.3. Task modality

The third and last research question asked whether task-modality had an impact on the production and outcome of LREs during collaborative pair work. Considering the occurrence of LREs in each task separately, Tables 7 and 8 illustrate the total number of LREs, the number of turns and the time needed to complete the picture differences and dictogloss tasks in each group. The data show that the task with the largest number of LREs was the dictogloss, which also generated the greatest number of turns and engaged students for a longer time in both control and experimental groups. A statistical analysis using the Wilcoxon Signed Rank test (non-parametric dependent samples t-test) revealed non-significant differences between the dictogloss and the picture differences tasks relative to the total number of LREs neither in the control group ($Z = -.763, p = .483$) nor in the experimental group ($Z = -.597, p = .571$). This means that there were no task-modality effects on the total amount of LREs produced and that the pretask modelling treatment did not seem to have an effect on the frequency of LREs generated in each task either.

CONTROL GROUP								
	Total LREs	Mean	SD	Time (min)	N of turns	Turns/min	LREs/min	LREs/turn
Picture Differences	17	1.21	1.48	36.53	131	3.59	0.47	0.13
Dictogloss	32	2.29	2.99	47.65	196	4.11	0.67	0.16

Table 7. Number of LREs per task in the control group

EXPERIMENTAL GROUP								
	Total LREs	Mean	SD	Time (min)	N of turns	Turns/min	LREs/min	LREs/turn
Picture Differences	57	3.56	4.26	57.38	221	3.85	0.99	0.26
Dictogloss	80	5.63	5.84	72.98	368	5.04	1.10	0.22

Table 8. Number of LREs per task in the experimental group

However, we have also analysed the differences in nature (lexis or form-focused) of the LREs across the two tasks in the two groups of participants. Table 9 features the total, average and percentage of lexis-based and form-based LREs generated in the picture differences and dictogloss tasks for the control group and Table 10 shows the same categories for the experimental group. The data indicates that participants produced a higher number of meaning-based LREs while carrying out the picture differences (94.12%; 92.98%) than in the dictogloss task (25%; 33.75%) in both the control and experimental groups, respectively. The Wilcoxon Signed Rank test showed, however, that there were no statistically significant differences between the picture differences and dictogloss tasks in the amount of lexical LREs produced in any of the groups ($Z = -2.070$, $p = .063$ for the control; $Z = -1.970$, $p = .055$ for the experimental group). In terms of form-focused LREs, by contrast, the participants generated a higher amount in the dictogloss (CG=75%; EG=66.25%) than in the picture differences task (CG=5.89%, EG=7.02%) in both the control and experimental groups respectively, which turned out to be statistically significant differences in both the control ($Z = -2.207$, $p = .031$) and the experimental group ($Z = -2.371$, $p = .016$), as confirmed by the Wilcoxon Signed Rank test. These

findings confirm Hypothesis 3, which predicted that the dictogloss would generate the highest number of LREs, focusing learners' attention on form, and the picture differences task would lead to a greater production of meaning-based LREs. We have observed above that the pretask modelling treatment had no influence on the amount of LREs produced in each task, but now we can also confirm by looking at these other figures that pretask modelling had no effect on the type of LRE produced in each task either.

CONTROL GROUP									
	Total LREs	Lexical LREs				Form LREs			
		N	Mean	SD	%	N	Mean	SD	%
Picture Differences	17	16	2.29	1.38	94.12%	1	0.14	0.38	5.89%
Dictogloss	32	8	1.14	1.21	25%	24	3.43	3.87	75%

Table 9. Lexical and grammatical LREs per task in the control group

EXPERIMENTAL GROUP									
	Total LREs	Lexical LREs				Form LREs			
		N	Mean	SD	%	N	Mean	SD	%
Picture Differences	57	53	6.63	4.03	92.98%	4	0.5	1.07	7.02%
Dictogloss	80	27	3.38	3.70	33.75%	53	7.88	6.92	66.25%

Table 10. Lexical and grammatical LREs per task in the experimental group

As for the resolution of LREs by task, Tables 11 and 12 illustrate the outcome of lexis and form-focused LREs in the two collaborative tasks (picture differences and dictogloss) for the control and the experimental group. The data show that students produced a higher number of correctly resolved lexis-based LREs in the picture differences task, whereas in the dictogloss they correctly resolved more form-focused LREs. This can be observed in both control and experimental groups.

CONTROL GROUP						
	Picture Differences		Dictogloss		TOTAL	
	LEX	FORM	LEX	FORM	LEX	FORM
CORRECT	8	1	8	20	16	21
INCORRECT	1	0	0	2	1	2
UNRESOLVED	7	0	0	2	7	2

Table 11. Outcome of LREs per task in the control group

EXPERIMENTAL GROUP						
	Picture Differences		Dictogloss		TOTAL	
	LEX	FORM	LEX	FORM	LEX	FORM
CORRECT	26	4	22	57	48	61
INCORRECT	5	0	1	3	6	3
UNRESOLVED	22	0	4	3	26	3

Table 12. Outcome of LREs per task in the experimental group

However, as confirmed by the Wilcoxon Signed Rank Test, only the differences in the amount of correctly solved form-based LREs generated by the

experimental group between the picture differences and the dictogloss were statistically significant ($Z = -2.207, p = .031$). Hypothesis 3 predicted that the amount of correctly resolved LREs would be the highest in the dictogloss, which has been confirmed, but the findings in Tables 9 and 10 also show that pretask modelling was more effective for the correct resolution of LREs—of form-focused nature to be precise—in the dictogloss.

Referring back to Kim and McDonough (2011), their findings do not include any information on the impact of pretask modelling on the frequency, type and outcome of LREs in each task modality. Therefore, as findings from the present study were only statistically significant for one type of LRE in one of the tasks, we believe that more fine-grained research is needed to tackle this issue.

6. Conclusions and lines for further research

This study has analysed the impact of pretask modelling on the collaborative learning opportunities taking place among adolescent learners in an EFL setting, since only one study (Kim & McDonough, 2011) has been conducted so far on pair work in this low-input context. As mentioned above, three previous pieces of research considered the pretask modelling variable, all of which were set in a French immersion classroom (LaPierre, 1994; Swain & Lapkin, 1998; Swain & Lapkin, 2001). Nevertheless, none of them analysed the effect of pretask modelling on students' interactional patterns and production of LREs. The aim of the current study was to fill the research gap and contribute with its findings to the literature.

The quantitative analysis of the data suggested that there were statistically significant differences between those learners who received pretask modelling and those who received no model in terms of overall production of LRE. However and

contrary to our hypotheses, statistically significant differences were only found between the experimental and control groups in lexis-focused LREs in terms of their nature and in the picture differences task for the correctly resolved and unresolved LREs in the two groups. From a qualitative perspective though, the results seem to indicate slightly better results on the part of the experimental group in the amount of lexical and form-focused LREs produced, and in the number of correctly resolved LREs, than in the control group.

Kim and McDonough (2011) claimed that pretask modelling might be a useful tool for encouraging students to interact in ways that are believed to promote L2 learning during peer interaction. Results from the present study, though, could not corroborate a significant difference between the group of learners receiving pretask modelling and the group that did not receive any model for all the LRE types in terms of nature or for both picture differences and dictogloss tasks in terms of outcome. It is unclear whether this was due to the small scale of the study or to other factors in the learning environment. As mentioned in the previous section, looking closely at the participants' production of LREs we can appreciate a remarkable variation among pairs, an issue that was not mentioned in Kim and McDonough (2011) but which was noted in Storch (2011) and Watanabe and Swain (2007). Participants' familiarity with each other while doing collaborative pair work does not necessarily mean that they have to collaborate with their partner in the same way. In fact, some pairs were found to be more collaborative than others and generate more LREs. However, the reasons for these results are not known and, at this stage, we can only speculate that motivation might have played a role. Thus, administering motivation questionnaires to assess learners and pair them on the basis of this individual difference would be an interesting line for future research. Be that as it may, the results may support the

sociocultural perspective that an assisted activity such as pretask modelling could lead to a higher level of attainment than a person or a pair/group of people working without assistance; however, as there is no pretest-posttest design in this study, this claim cannot be confirmed.

As for task-modality effect—picture differences vs. dictogloss tasks—on LRE production and outcome, it has been found that in this study there was not such effect on the total amount of LREs produced and that pretask modelling had no influence on it either. However, the picture is slightly different with regard to the nature of LREs. The participants' significant increase on their production of form-focused LREs in the dictogloss task when compared to the picture differences in both control and experimental groups confirms that there is a task-modality effect on the nature of LREs. Similarly to the findings in Alegría de la Colina and García Mayo (2007) or García Mayo and Azkarai (in press), the present study has shown that the dictogloss focuses learners' attention on form and the picture differences task on meaning, although the significance of this last task's effect could not be confirmed in the current study. Apart from that, pretask modelling seems to have no effect on the type of LRE produced in each task.

The outcome of LREs, unlike what happens with respect to the production of LREs, seems to be influenced by the type of task and the treatment. This means that the amount of correctly resolved LREs was the highest in the dictogloss in the pretask modelling group. As mentioned in the previous section, Kim and McDonough's (2011) study did not include any information about the impact of pretask modelling on the frequency and resolution of LREs in each task, therefore further investigation on this topic would be helpful in order to find out which activities would benefit this aspect the most.

The role of pair dynamics as considered in Storch's (2001, 2002a, 2002b) framework seemed to be affected by pretask modelling, which favoured collaborative pair dynamics. These findings were similar to those in Kim and McDonough's (2011) study.

Learners in a foreign language context typically share the same L1, which they may use to discuss features of the foreign language during collaborative tasks. In order to encourage the use of that foreign language, the pretask audiovisual models showed collaborative task performance in which the researcher and the teacher discussed linguistic forms in English and had very limited use of Spanish or Basque. Even though the present study was not designed to measure the impact of pretask modelling on learners' L1 and foreign language use, some trends in the data suggest that the pretask modelling group may have attempted better English use than the control group. Alegría de la Colina and García Mayo (2009), Storch and Aldosari (2010), and Azkarai and García Mayo's (2015) studies are among the few pieces of research dealing with the influence of L1 use in collaborative pair work. Further investigation on this topic is needed, especially on bilingual contexts where a foreign language is being taught such as in the Basque Autonomous Community (BAC).

One of the challenges while carrying out this study included finding enough students with the same linguistic background and class methodology. As explained in section 3.2, we preferred to adapt Kim and McDonough's (2011) methodology to the BAC context in order to have a similar amount of hours of exposure in both studies. Besides, we decided to have a mixed group instead of a female-only one because we were afraid of not finding enough female participants with the same linguistic background and profile. However, as this study focused only on a small number of

participants, most of whom had an elementary proficiency level, it is important to remark that results cannot be generalised across proficiency levels.

Although the findings indicate that pretask modelling may be an effective pedagogical technique for helping young EFL students discuss language form and adopt collaborative pair dynamics, the current study has limitations that should be acknowledged. Previous studies have used tailor-made post-tests to characterise the longer-term effect of LREs on linguistic development (Kim, 2008; Swain, 1998; Swain & Lapkin, 1998; 2001) and future studies should continue to develop additional methods for assessing the relationships among pretask modelling, LREs and foreign language development. For instance, will specific characteristics of pretask models such as the interlocutors' age, proficiency level and familiarity with the students have any impact on task performance? This would certainly provide interesting insights for teachers, something needed to optimise language learning in the foreign language classroom.

Other interesting lines of research could be gender effects on students' performance in different tasks, as only Azkarai and García Mayo's (2012) study has dealt with this topic so far, and pretask modelling effect on learner's performance in terms of gender, a completely empty field of research. This line of investigation could observe learners' production of LREs, comparing male and female pair work after receiving pretask modelling or produce two different gender-based pretask models and analyse their effects on collaborative tasks in terms of LRE frequency and resolution. To conclude, other possible appealing topics may be student-selected vs. teacher-selected pair-effect in the production of LREs in collaborative tasks, since recent studies have suggested that the student-selected method may be more beneficial in terms of group dynamics (Bacon, et al., 1999; Hassaskhah & Mozaffari,

2015; Hilton & Philips, 2008; Russell, 2010) and outcome (Mahenthiran & Rouse, 2000; Mushtaq et al., 2012). And finally, the effect of pretask modelling on the nature and outcome of LREs considering learners' proficiency, which has been proven to be a relevant factor in the production of LREs in some ESL (Kim & McDonough, 2008; Leeser, 2004; Watanabe & Swain, 2007, 2008) and EFL studies (Alegría de la Colina & García Mayo, 2007; Storch & Aldosari, 2013) dealing with collaborative pair work and pair dynamics, should also be considered.

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