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# Trabajo Fin de Máster

## *Master Bukaerako Lana*

# How pair formation method affects language-related discussions, peer dynamics, agency and emotions in collaborative writing

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## Abstract

A growing body of research on collaborative writing (CW) has started to assess how different factors may influence the interactional patterns and language-related episodes (LREs) that occur during CW tasks. Studies examining the impact of the pair formation method are relatively few, and more research on the determinants that may explain this influence is needed. Moreover, no study has yet explored how pairing conditions influence students' agency and emotions. Thus, this study examined the patterns of interaction, LREs, types of agency and emotions that take place in student-selected and teacher-selected pairs, as well as students' views on CW and pair formation methods. Participants were 24 L1 Spanish EFL learners enrolled in an official language school, who were asked to write two reports in pairs but the pairing condition differed in them, it was either teacher (TS) or student-selected (SS). The peer dialogues that emerged were audio recorded, transcribed and coded for LREs (types and resolution) and patterns of interaction. A smaller sample of participants (n=16) responded to a questionnaire that canvassed students about their views on CW, its usefulness for EFL development and pair formation methods. The transcripts and the questionnaire were used to analyse agency and emotions. Results revealed that SS pairs produced more LREs but TS dyads had more correctly resolved LREs. TS pairs showed a wider variety of patterns of interaction. SS pairs' agency was more collaborative than individual, and TS dyads showed more mixed emotions than SS pairs. Pedagogical implications for the teaching of English will also be drawn.

*Keywords:* collaborative writing; pair formation method; patterns of interaction; LREs; agency; emotions.

## Resumen

Un número creciente de investigaciones sobre la escritura colaborativa (EC) ha comenzado a evaluar cómo distintos factores pueden influir en los patrones de interacción y en los episodios relacionados con el lenguaje (ERL) que se producen durante la EC. Los estudios que examinan el impacto de las condiciones de emparejamiento son relativamente escasos, y se necesita más investigación sobre los factores determinantes que pueden explicar esta influencia. Además, ningún estudio ha explorado cómo las condiciones de emparejamiento influyen en la agencia y las emociones de los estudiantes. Por lo tanto, este estudio examinó los patrones de interacción, los ERL, los tipos de agencia y las emociones que tienen lugar en parejas seleccionadas por los estudiantes (SS) y asignadas por los profesores (TS), así como las opiniones de los estudiantes sobre EC y las condiciones de emparejamiento. Los participantes fueron 24 estudiantes españoles estudiando inglés matriculados en una escuela oficial de idiomas, a los que se pidió que escribieran dos informes en parejas, pero la

condición de emparejamiento difería en ellos, TS o SS. Los diálogos se grabaron, se transcribieron y se codificaron en busca de ERL (tipos y resolución) y patrones de interacción. Una muestra más reducida de participantes (n=16) respondió a un cuestionario en el que se preguntaba a los estudiantes su opinión sobre EC, su utilidad para el desarrollo del inglés como lengua extranjera y los métodos de formación de parejas. Las transcripciones y el cuestionario se utilizaron para analizar la agencia y las emociones. Los resultados revelaron que las parejas SS produjeron más ERL, pero las díadas TS tuvieron más ERL correctamente resueltos. Las parejas TS mostraron una mayor variedad de patrones de interacción. La agencia de las parejas SS era más colaborativa que individual, y las díadas TS mostraron más emociones mixtas que las parejas SS. Se incluyen implicaciones pedagógicas para la enseñanza de inglés.

*Palabras clave*: escritura colaborativa; método de emparejamiento; patrones de interacción; ERLs; agencia; emociones.

# INDEX

## 1. INTRODUCTION

During the last decades, researchers within the field of second language (L2) teaching and learning have begun examining the potential of writing as a skill that can lead to L2 learning rather than just as a skill to be learnt (Williams, 2012). Studies that have explored the learning opportunities of writing have revealed that written output boosts students to notice gaps in their knowledge, which leads them to engage in cognitive processes that "may play a role in second language learning" (Swain & Lapkin, 1995, p.383). Moreover, it has been considered that the permanent and slow-paced nature of writing allows learners to manage their attentional mechanisms and focus on language (López-Serrano et al., 2019; Williams, 2012). Along the same lines, collaborative writing (CW) has attracted considerable attention in the field of L2 teaching and learning (Zhang, 2019). CW can be defined as "the joint production or the coauthoring of a text by two or more writers." (Storch, 2011, p. 275). This shared authorship is what renders CW distinct from other pair or group activities that take place during writing instruction, such as peer-review or group planning (Storch 2011).

CW tasks have been claimed to offer opportunities for language learning to students (Fernández Dobao, 2012; Shehadeh, 2011; Storch, 2005), as it has been observed that the collaborative dialogue that emerges during CW is "a source of L2 learning" (Swain & Watanabe, 2012). Studies that have focused on this aspect (Fernández Dobao, 2012; Li & Kim, 2016; Storch, 2005; Swain & Lapkin, 1998) have shown that peer collaboration during CW tasks allows learners to co-construct texts by sharing their linguistic resources (Storch, 2005), as well as reflect on language use, try out and corroborate their hypotheses, contribute and evaluate ideas and receive feedback from one another (Fernández Dobao, 2012).

Studies recently examining the processes that occur during collaborative written tasks have placed value on investigating the impact of different factors on the collaborative dialogue, since it has been observed that they may determine the quantity as well as the quality of those peer discussions. The research done until now has examined the influence of elements such as patterns of interaction (Azkarai & Kopinska, 2020; Storch, 2002), students' proficiency (Gallardo del Puerto & Basterrechea, 2021; Storch & Aldosari, 2013), the type of task (García Mayo & Imaz Agirre, 2019) and number of participants (Fernández Dobao, 2012). In recent years, some studies have begun to incorporate an aspect that has been unexplored until now, which is the effect of pair formation on students' peer interactions and dynamics. The few studies conducted to date seem to indicate that pairing conditions do exert an influence on the quality of those interactions, which in turn may affect students' learning opportunities (Basterrechea & Gallardo del Puerto, 2023; Gallardo del Puerto & Basterrechea, 2021;

García Mayo & Imaz Agirre, 2019; Mozaffari, 2017). However, further examination needs to be done to assess the factors that may explain the influence of pairing conditions on this matter.

On the subject of features that have an influence in CW, a call for research on agency has been made recently, since it's a variable that can influence learners' behaviour, and the scarce research done until now has mostly focused on students' goals and orientation (Storch, 2021). This study seeks to expand research on agency by incorporating other agentic elements informed by previous literature. Moreover, it has been suggested that there are two types of agency, one -collaborative agency- being of higher quality than the other -individual agency- (van Lier, 2008). However, to the best of my knowledge, only one study has incorporated this distinction into their analysis (Li & Zhu, 2017). Said study also pioneered in examining the direct relation between the types of agency and students' emotions, the last of which seem to affect students' willingness to accept new knowledge given by peers (Imai, 2010).

Thus, the present study sought to examine how learner setup influences the peer interactions and dynamics that had occurred in 17 pairs placed under two different pair formation conditions (student-selected and teacher-selected). Moreover, this study examined the interplay between types of agency and emotions, as well as the influence of pair formation method on both dimensions. This study should therefore inform about how pairs should be formed to maximize students' learning potential, boost their agency and procure a positive learning environment.

## 2.    LITERATURE REVIEW

In recent years, an expanding body of literature relating to collaborative writing (CW) has surfaced, as a result of a growing interest in its benefits and the possibilities it can bring to EFL/ESL classrooms which include peer assistance, metalinguistic awareness and pooling of ideas and linguistic resources (Storch, 2023). Research on CW has been significantly influenced by Lev Vygotsky's (1978) sociocultural theory because human intellectual development is tightly tied to social interaction which takes place through means of "speech" and "practical activity" (Vygotsky, 1978, p. 24). Vygotsky stated that language equips humans -and specifically, children- with tools to solve challenging tasks. Moreover, his theory sheds light on the fact that such interactions can lead humans to reach their learning potential through proper guidance and scaffolding by "more capable peers" (Vygotsky, 1978, p. 86). Researchers investigating peer collaboration for L2 learning have followed this approach, examining the positive impact of scaffolding between "expert" and "novice" learners (Swain & Lapkin, 1998). Nevertheless, it has also been observed that parallel-level pairings -i.e. pairs formed by members with similar proficiency- can also benefit from each other (Storch & Aldosari, 2013). One of the approaches that studies have taken to observe the advantages of peer collaboration is to examine

how students deliberate about language, a phenomenon which has been coined as a language-related episode (LRE) (Swain & Lapkin, 1998).

## 2.1. Language-related episodes (LREs)

Swain and Lapkin (1998) describe an LRE as "part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others" (p. 326). LREs are part of a phenomenon known as *languaging*, defined by Swain (2006) as "the process of making meaning and shaping knowledge and experience through language" (p. 98). The collaborative dialogues that give rise to this process can potentially lead to L2 learning as they are the medium in which students construct jointly the language they need for their written compositions (Swain & Lapkin, 1998).

Several studies (Azkarai & Kopinska, 2020; Fernández Dobao, 2012; Storch, 2005; Swain & Lapkin, 1998; Villarreal & Gil-Sarratea, 2020; Zhang, 2019) have focused on the collaborative dialogue that takes place in LREs. These episodes deal with grammar and lexical issues (Swain & Lapkin, 1998) as well as more mechanical aspects such as spelling, punctuation or pronunciation (Fernández Dobao, 2012). However, previous research has reported that adult students tend to devote more time to deliberating about grammar and vocabulary than language mechanics (Fernández Dobao, 2012; Mozaffari, 2017; Zhang, 2020) whereas young learners may concentrate more on form and mechanics than lexis (Lázaro-Ibarrola & Hidalgo, 2022).

Apart from the nature of LREs, some studies have analysed the outcome of the LREs produced during pair discussions, showing that not all LREs are conducive to learning, since students may deliberate but not reach the correct or desired resolution. Research has shown there are determinants that may influence the outcome of the LREs. A study conducted with adolescents in a FL setting showed that a high proportion of students resolved the deliberations correctly (Villarreal & Gil-Sarratea, 2020). Correctly resolved outcomes seem also to be standard in pairs and groups (Fernández Dobao, 2012), as well as different proficiency groups (Storch & Aldosari, 2013). However, research done on other aspects have revealed that other factors may influence the outcome of LREs, such as task modality (García Mayo & Imaz Agirre, 2019) and pair formation method, a determinant that has started to be considered recently (Gallardo del Puerto & Basterrechea, 2021; García Mayo & Imaz Agirre, 2019; Mozaffari, 2017).

## 2.2. LREs and pair formation method

Little research has still explored the effect that the pair formation method could exert on the pair dynamics and languaging that take place in CW.  Existing research seems to demonstrate that the

pair formation method affects the quantity and quality of deliberations about language. García Mayo and Imaz Agirre (2019) investigating this aspect and task modality with young learners observed in their analysis that SS was the condition that had produced the lowest rate of LREs, proficiency-matched dyads being the ones to generate more LREs compared to the other two conditions. Similarly, a study conducted by Mozaffari (2017) with adult Iranian EFL learners revealed that TS pairings had produced more LREs than SS ones.

Research examining pairing conditions have also observed their influence on the types of LREs. Studies done with young EFL learners in Spain (Basterrechea & Gallardo del Puerto, 2023; García Mayo & Imaz Agirre, 2019) have shown that students in every condition produced more lexis-based LREs (i.e. vocabulary-related) than form-based LREs (i.e. grammar-focused), whereas adult learners seem to focus on grammar and vocabulary almost equally, paying less attention to mechanical aspects such as punctuation and spelling (Mozaffari, 2017). As for the resolutions, it has been revealed that proficiency-paired students produce more accurate LREs than learners in the SS condition (Basterrechea & Gallardo del Puerto, 2023). Research done with adults (Mozaffari, 2017), on the other hand, showed that TS pairings produced more correctly resolved LREs than SS dyads.

Analysing the data obtained in these studies, it has been observed that SS pairs tend to be less task-oriented than the learners placed in the other conditions (Basterrechea & Gallardo del Puerto, 2023; Mozaffari, 2017; García Mayo & Imaz Agirre, 2019). As indicated by Mozaffari (2017), learners' pre-existing friendship -which was the criteria to form SS pairings in his study- may have contributed to those findings, an observation that has been further attested in subsequent research (García Mayo & Imaz Agirre, 2019). Therefore, what relationships students create can influence how they engage with the task and consequently, their text quality (Mozaffari, 2017). As a result, a call for research has been made to examine the interplay between students' criteria, the pair formation method and the LREs (Basterrechea & Gallardo del Puerto, 2023).

## 2.3. Patterns of interaction and pair formation method

Studies that have set out to investigate the dynamics that emerge during collaborative tasks, with the object of discovering the extent of their influence in pair talk and ultimately on text quality (Azkarai & Kopinska, 2020; Li & Kim, 2016; Storch & Aldosari, 2013; Zhang, 2019) have mainly followed the taxonomy devised by Storch (2002) to classify pair or group dynamics.

Observing the behaviour exhibited by students during collaborative tasks, Storch (2002) sought to detect dynamic patterns based on two parameters: *mutuality*, which pertains to students' "level of engagement with each other's contribution", and *equality*, which refers to the distribution of authority

between peers (p. 127). The combination of these two parameters resulted in four patterns of interaction, each with distinct characteristics, described below:

- Collaborative: Both members of the pair take part in the composition of the task (high equality) and take each other's ideas into consideration (high mutuality).
- Dominant/dominant: Both students contribute to the task (high equality) but fail to engage with their partner's ideas (low mutuality), which could lead to disputes.
- Dominant/passive: There is a power imbalance in the dyad. One member assumes control over the task while the other adopts a more submissive stance (low equality). No debate arises due to the passive role of one of the members (low mutuality).
- Expert/novice: One of the participants acts as the expert taking charge of the composition of the task (low equality), but gives support to the other participant -i.e. the novice- incentivising them to contribute (high mutuality).

Among these four dyadic patterns, it was found that the ones that seemed more conducive to language learning were the collaborative and expert/novice patterns; given that there was high engagement in both dynamics, participants scaffolded each other by assisting or pooling resources (Storch, 2002). Drawing on the model proposed by Storch (2002), subsequent studies have identified other types of patterns of interaction. For those additional patterns, check Watanabe and Swain (2007), Tan et al. (2010) and Azkarai and Konpinska (2020).

Studies examining peer dynamics have also analysed the interplay between patterns of interaction and other aspects. Storch and Aldosari (2013), for instance, examining the relation between proficiency and patterns, found that parallel-level pairs were mostly collaborative, whereas pairings formed by students of different proficiency levels displayed variation, the expert/novice and dominant/passive patterns being more common. On the other hand, studies investigating the influence of pair formation method on patterns of interaction found that the collaborative pattern was predominant in all pairing conditions, among adult EFL learners (Mozaffari, 2017) and young EFL learners (García Mayo & Imaz Agirre, 2019). However, in the study conducted by García Mayo and Imaz Agirre (2019), which analysed the effects of both task modality and pairing method, it was found that proficiency-paired dyads were more collaborative than the other conditions in the task modality which involved CW, which means that students had to share their linguistic resources to compose a joint text. The number of studies analysing the interplay between pairing conditions and patterns of interaction is relatively small, and thus, it is of interest to investigate this issue further to attest whether pair formation method exerts an influence on peer dynamics. Other aspects that are present in peer interaction that researchers of SLA and L2 have started to discuss are the construct of agency and emotions (Storch, 2021).

## 2.4.    Agency and emotions

Agency is a concept whose significance has been pointed out as a variable that can influence students' behaviour and the relationships they form with others during CW tasks (Storch, 2021). Agency is a sociocultural notion that can be described as "a contextually enacted way of being in the world" (van Lier, 2008, p.163). It is the ability to take action in order to realise one's own objectives which rely on interpersonal aspects such as "power hierarchies" and "expected norms of behaviour" (Storch, 2021, p.28).

In an attempt to develop a construct of agency that could be empirically applied in research, van Lier (2008) studied the ways in which agency manifests in the classroom and observed that it can be enacted in varying degrees, from a passive stance to a committed attitude. Based on his observations, van Lier (2008) made a distinction between individual and collaborative agency. Individual agency is the manifestation of aspects such as "volition", "initiative", "intentionality" and "autonomy" (p.171), whereas collaborative agency gathers "the creative energies and symbolic capacities of a larger number of learners" (p. 169). Due to the synergy that collaborative agency creates, van Lier suggested it to be of "a higher level of classroom quality" than individual agency (p.169). This second type of agency manifests itself when students scaffold or instruct each other, as well as when they engage in debate (van Lier, 2008). CW sets the appropriate conditions for scaffolding, as it allows students to help their peers on the spot when gaps are found during the writing process (Storch, 2021).

Emotions are another aspect related to agency that Vygotsky (1978) considered to be tied to cognition. As van Lier (2008) stated, "learning (...) is a whole-person, body and mind, socially situated process" (p.180). From this sociocultural viewpoint, Imai (2010) indicated that emotions are "socially constructed acts of communication that can mediate one's thinking, behaviour, and goals." (p.279). As such, emotions could affect how students collaborate and how cognition is developed (Imai, 2010). Few studies (Li & Zhu, 2017; Pu, 2020) have investigated the presence of agency and emotions during CW tasks. Li and Zhu (2017) analysed dynamic interactions in wiki-based CW tasks considering the sociocultural factors of goals, agency and emotions. Regarding the last two, they drew on van Lier's (2008) classification of agency and examined the relation between types of agency and emotions across two CW tasks. The results showed that collaborative agency was tied to positive emotions. Conversely, when there was little to no presence of collaborative agency, negative emotions were detected. By and large, the notion of agency and the emotional dimension of CW remains considerably unexplored. Another issue that requires attention is students' perceptions of certain aspects of writing collaboratively.

## 2.5.    Students' perceptions

Students' perceptions and attitudes are said to impact how they engage in classroom activities and how much they learn from them (Peng, 2011). Studies focused on students' views (e.g., Fernández Dobao & Blum, 2013; Shehadeh, 2011; Storch, 2005) have revealed that learners tend to demonstrate a positive attitude towards the CW experience. Undergraduate students usually attribute it to the fact that CW creates a space for students to help each other with the language as well as share ideas and new ways of expressing their thoughts (Storch, 2005). On a similar note, a study conducted in a Chinese teacher-centered learning environment (Chen & Yu, 2019) revealed that students valued the possibility of sharing and negotiating their ideas with their peers. These learners also found CW to be a fun and stress-reducing experience that had improved their self-confidence, and that had allowed them to interact with people that they had not worked with before.

Regarding students' perceptions on the potential of CW tasks for L2 or FL development, most studies have reported positive attitudes (Chen & Yu, 2019; Fernández Dobao & Blum, 2013; Shehadeh, 2011; Villarreal & Munarriz-Ibarrola, 2021; Vorobel & Kim, 2017). CW was considered helpful for improving their vocabulary and grammar knowledge (Fernández Dobao & Blum, 2013) and they appreciated the fact that CW allowed them to develop different language skills such as speaking and writing (Shehadeh, 2011; Vorobel & Kim, 2017). Learners from various studies also acknowledged that writing collaboratively had helped them create written compositions of higher quality, as the pooling of resources and assistance improved their performance in aspects such as content, grammar, word choice, organisation and cohesion (Chen & Yu, 2019; Vorobel & Kim, 2017).

Nevertheless, some reservations have also been reported. Among the concerns shared by participants, some expressed lacking confidence and being afraid of criticizing and hurting their classmates' feelings (Storch, 2005; Vorobel & Kim, 2017). Other challenges that students encountered were that they found gaps in their L2 proficiency (Vorobel & Kim, 2017) or that "inactive participation" due to shyness could elicit negative feelings like isolation (Chen & Yu, 2019).

Apart from learners' general views, some studies have also explored students' attitudes toward specific aspects. For instance, research has examined students' preference between individual writing and CW. By and large, the number of students preferring individual writing over CW was very small (Fernández Dobao, 2013; Shehadeh, 2011; Storch, 2005; Villarreal & Munarriz-Ibarrola, 2021). However, some authors like Elola and Oskoz (2010) found that students' views on individual writing and CW were subject to their individual preferences, challenges and accomplishments, or as Storch (2005) reported, subject to their conceptions of writing, as some viewed writing as an activity to be done individually. On the other hand, although studies have looked into students' views between individual and CW, other aspects such as students' preference for pairing conditions is yet to be studied.

Few studies have examined the influence of the pair formation variable on the production of LREs, and the interplay between students' motives, pair formation method and LREs needs further consideration. Moreover, research investigating the impact of pairing conditions on patterns of interaction is relatively scarce, and students' agency and emotions during CW tasks are largely unexplored. Additionally, students' views on certain elements of CW have not been examined to this date. On this account, the current study seeks to address these gaps by examining LREs, patterns of interaction, students' agency and emotions on 24 adult EFL learners placed in SS and TS pairings. It also attempts to expand previous research on students' perceptions by exploring learners' attitudes toward CW, its benefits for EFL learning and the pair formation conditions.

## 3. METHODOLOGY

The present study set out to investigate the impact of the pair formation method on the nature, frequency and resolution of LREs, interactional patterns, students' agency and emotions. The study also aimed at elucidating students' views on CW, its usefulness for EFL development and their preferences regarding pair formation methods. With this aim, 24 participants were placed in 17 pairings under the SS and TS conditions, their pair talk examined and finally, they were surveyed. In particular, the investigation addressed the following research questions:

RQ1: Does the pair formation method influence the frequency, nature and outcome of LREs?

RQ2: Does the pair formation method have an impact on patterns of interaction among EFL students?

RQ3: Does the pair formation method influence the manifestation of agency and emotions in CW?

RQ4: What kind of attitudes do EFL students show regarding CW, the pair formation method and the usefulness of CW for EFL development?

Regarding the nature, quantity and resolution of LREs, following Mozaffari (2017) and García Mayo and Imaz Agirre (2019) learners placed under the TS condition are expected to produce more LREs and resolve more of them correctly than the SS, showing no difference when it comes to their nature. In addition, no disparity is anticipated either regarding the patterns of interaction, as most dyads from each pairing condition are expected to display a collaborative pattern, as it has been observed that leaners tend to act collaboratively regardless of the pairing condition they are placed in (García Mayo & Imaz Agirre, 2019; Mozaffari, 2017). As for agency and emotions, there is no evidence in the literature that helps to predict whether the pair formation method will be a factor; on the other hand, following the little existing literature examining the interplay between types of agency and emotions

(Li & Zhu, 2017) collaborative agency is expected to elicit positive emotions. Regarding students' views, the overall attitude toward CW is anticipated to be positive, with little to no concerns expressed (Chen & Yu, 2019; Storch, 2005; Fernández Dobao, 2012). It is anticipated that students will find CW useful for EFL development (Fernández Dobao & Blum, 2013; Shehadeh, 2011), and that CW will be favoured more than individual writing (Fernández Dobao, 2013; Shehadeh, 2011; Storch, 2005; Villarreal & Munarriz-Ibarrola, 2021). Although no study has yet explored learners' preference regarding the pair formation method (TS, SS or proficiency-paired), students' responses are expected to be mixed.

### 3.1. Participants

Participants of the study were 24 L1 Spanish EFL learners (37.5% female, 62.5% male) attending a one-year English course in an Official Language School in Northern Spain. Their ages ranged from 16 to 68 (mean= 38). and had diverse sociocultural and educational backgrounds. 11 students belonged to a B2.1 level group and 13 to a B2.2 level group. Participants reported having enrolled in the course due to intrinsic goals, such as self-realization and improving their English skills. The course also had instrumental value to a smaller number of them (n=5), who expressed their objective of obtaining the B2 certificate. The study was conducted at the final stage of the course, by which time most students knew each other well.

Each group had two sessions of 2.15h per week and were taught by the same teacher, who strived to provide an instruction that balanced the use of the course books and activities created by the teacher. Taking a communicative approach, the aim of these activities was to foster students' speaking and mediation skills, as their communicative competence was the teacher's major concern. Consequently, students had multiple opportunities for interaction in their classes and working in pairs or groups was part of regular practice. On a daily basis, whilst completing grammar and vocabulary exercises from the course book, many would also work in pairs unprompted. Moreover, students had written collaboratively earlier in the course, as the teacher had on one occasion placed them in pairs to practice informal letter writing.

### 3.2. Instruments

In order to collect the necessary data for the study, two different instruments were used: audio-recordings and a questionnaire. The recordings served to gather information regarding the process of CW, therefore, students' conversations were audio-recorded whilst completing the tasks. These recordings were then manually transcribed and analysed for patterns of interaction, agency and LREs.

With a view to elicit students' perceptions and to analyse the role of agency and emotions, a questionnaire was developed (See Appendix A for the full questionnaire). The questionnaire consisted of seventeen questions:

- Two closed-ended questions in which participants had to specify their age and the dyads to which they belonged for identification purposes.
- Fifteen open-ended questions covering different aspects related to CW, EFL learning, pair formation method, agency and emotions. Students were encouraged to elaborate on their responses, thereby obtaining meaningful insights into their views.

The two closed-ended and fifteen open-ended questions were distributed into four sections. The first section, which contained two close-ended questions and one open-ended, addressed identification matters and students' motivations for enrolling in an English course. The second section was formed by six open-ended questions, the first two (Questions No. 4 and 5) aimed at elucidating participants' general impressions of their experience. Question No. 6 (adapted from Fernández Dobao & Blum, 2013), addressed students' preference for individual or CW. The remaining three questions were devised to obtain students' views on the pair formation method and asked them about the reason behind their partner choice, their preference between the two pairing conditions and the perceived quality of the written productions regarding the pairing conditions.

The third section, containing five questions, was designed to explore students' agentic roles and the emotions they experienced through the process. Following previous research on learners' motivation (Azkarai & Kopinska, 2020; Lázaro Ibarrola & Villarreal, 2022), questions No. 10 and 11 were included to observe how students had felt before, during and after the tasks. Question No. 12 targeted collaborative agency (Li & Zhu, 2017) and asked participants to describe how they had handled the situation when there had been a discrepancy between them. On the other hand, questions No. 13 and 14 were included to observe if participants valued any qualities that fit with van Lier (2008)'s interpretation of individual agency (e.g. responsibility and commitment). and if they had shown any of said qualities during the tasks.

The final set of questions (No. 15, No. 16, and No. 17) focused on asking participants about the benefits of CW for EFL learning, and were adapted from Fernández Dobao and Blum (2013) and Shehadeh (2011). The questionnaire was translated into Spanish to ensure participants would not find any obstacles when expressing their thoughts on the most complex issues.

### 3.3. Procedure

The two writing tasks that were selected for the purpose of the study (see Appendix B) were designed in accordance with the curriculum that the English course followed. As the B2.2 group was to take an official exam at the end of the academic year, the writing tasks dealt with a type of writing students needed to practice: a report. The intervention for this study took place over two weeks in April, devoting one session per week to each of the writing tasks, as displayed in Table 1.

*Table 1: Data collection timeline*

| Day 1 (April 19th) | <ul><li>Writing and grammar lesson.</li><li>Informed consent form.</li><li>Pair formation:<ul><li>5 student-selected dyads and one triad.</li><li>4 teacher-selected pairs.</li></ul></li><li>Task 1 (40 minutes).</li></ul> |
|---|---|
| Day 2 (April 26th) | <ul><li>Revision of the report.</li><li>Pair formation:<ul><li>2 student-selected dyads and one triad.</li><li>5 teacher-selected pairs.</li></ul></li><li>Task 2 (40 minutes).</li><li>Questionnaire.</li></ul> |

In the first session, students were introduced to the study and signed a consent form by which they gave permission to be audio-recorded. The first half of said session was then devoted to teaching students about the structure, language and the steps that should be followed during the writing process of a report; they were encouraged to take notes of what they deemed important. This part of the session was complemented with some practical and student-centered activities, like a matching activity to introduce them to the grammar needed for the writing and a broken text activity to introduce them to the structure of the report. The second half of the session was dedicated to the completion of the first writing task (40 minutes). For that, participants were divided into two groups:

- Five student-selected dyads and one triad (due to an uneven number of participants in the B2.2 class), in which participants were allowed to choose their partners. At the end of the study, students were asked to explain the criteria they had followed.
- Four teacher-selected dyads. The dyads were formed following García Mayo and Imaz Agirre's (2019, p.169) criteria of the teacher's knowledge of students' "personality and of who would be a better partner".

Once all participants were sorted, they were given a prompt containing the necessary context for their report, and they were given 40 minutes to complete it on paper. Students were instructed not to consult any external source for language-related matters, and except for a few students who needed to be reminded of this instruction -since they were caught trying to get their phones to look something up-, participants complied with the rule.

The second session of the intervention, which took place the following week, was partly dedicated to the second writing task. After a quick review of the essential aspects of a report, students were reassigned to a new partner. In this case, the pair formation conditions were swapped; those who had had the chance to choose their partners in the first session were now sorted by the teacher's criteria; conversely, the participants who had been TS for the first writing task selected their partner for the second. There were two additional participants in the B2.1 class who did not attend the previous session, and thus, they were sorted by the teacher so they would not be at a disadvantage. On this occasion, there were two SS dyads and one triad and five TS dyads. Similar to the first task, students were given a prompt with the needed context and had 40 minutes to complete it on paper. Participants were reminded not to resort to external sources for assistance. After finishing this second writing task, the participants that were present (n=16) filled out the questionnaire.

## 3.4. Data analysis

Data analysis was carried out following a mixed methods approach. Regarding the recordings from the writing tasks, the conversations were transcribed verbatim and each transcript was analysed separately, as well as classified as either belonging to a SS or a TS pairing. Even though participants were given 40 minutes to complete each of the tasks, the pairings finished at different times. The recording of one SS pairing was discarded since one of the participants' voices was not registered properly by the tape recorder, so 17 pairs formed the corpus.

In order to obtain results for the first research question, the transcripts were analysed for LREs and these were coded according to their frequency, nature and outcome. The frequency was calculated based on the number of instances per total instances. Matching previous research (Basterrechea & Gallardo del Puerto, 2023; Fernández Dobao, 2012; García Mayo & Imaz Agirre, 2019; Swain & Lapkin, 1998; Villarreal & Gil-Sarratea, 2020), LREs were coded as either being form-based (focused on grammar), lexis-based (focused on vocabulary) or mechanical-based (focused on spelling, punctuation or pronunciation). Finally, their outcomes were coded as resolved when participants found the correct solution to the issue and unresolved when they reached a wrong resolution or failed to decide on what they were deliberating. All the data per pair formation condition were tallied and the percentages calculated.

The following extracts are instances of correctly resolved and unresolved LREs found in the data. Excerpt 1 shows a form-based LRE in which one of the members raises doubts on whether the verb "recommend" should be followed by infinitive to or -ing. Both members reach the conclusion that "recommend" must be followed by -ing.

**Excerpt 1: Form-based LRE - Resolved**

A: I would recommend offering more public transport-

B: Offering? Offering or offer?

A: Ah, ah. Recommend… recommend to offer or recommend offering.

B: Recommend offering.

A: Offering, *verdad*? *Yo creo que sí*. [right? I think so.] Recommend *con* [with] -ing. Offering.

B: Suggest, recommend, with -ing, no?

A: Suggest, recommend, with -ing, yes.


The form-based LRE displayed in excerpt 2 shows students deliberating about a verb and choosing the incorrect form (past tense instead of infinitive).

**Excerpt 2: Form-based LRE – Unresolved (Wrong resolution)**

B: Useful… to seek or to found, found? To *encontrar.*

A: Yeah, to found… eh… the answers of the… eh, task, or…

B: Found… we can say, information, information. You can, you, eh, you can found in the internet.


In the lexis-based LRE illustrated in excerpt 3, student B cannot recall an English lexical item and student A assists him with an answer.

**Excerpt 3: Lexis-based LRE - Resolved**

B: The students' laptop, eh… *pantalla* [screen]?

A: The screen.

B: Screen?

A: The screen of the, eh, of the computer, of the students'...


Excerpt 4 shows an unresolved lexis-based LRE in which students decide to change the information they are going to write because they cannot come up with the correct term to describe what they have initially thought of.

**Excerpt 4: Lexis-based LRE – Unresolved**

A: *Robo a un banco, típico, ¿y ya está?* [What if we put bank robbery, the typical thing, and that's it?]

B: Okay. Firstly, eh… *es que soy más malo para esto… ¿cómo se dice robar un banco?* Stole… *es que no es* stole [I'm so bad at this… how do you say robbing a bank? Stole… it's not stole]

A: *Si no, a ver… si no podemos poner…* [Otherwise, let's see… otherwise, we can put…] firstly, *yo pondría,* [I would put] fear… some people, eh...

A: Firstly, *osea, mucha gente… les robaron el móvil…* [I mean, a lot of people… they had their phones stolen…]

B: Ajá. [Uh-huh]

Excerpt 5 illustrates a mechanical-based LRE in which student B does not remember how the word "know" is spelled, and student A solves his doubts.

**Excerpt 5: Mechanical-based LRE - Resolved**

B: *Osea con el objetivo de*… [I mean with the objective of…]

A: Know…

B: Yes, to know.

A: *El* know *era con k o sin k*? [Know was with a k or without k?]

B: *Con* k. [With]

A: *Con* k. [With]

Finally, excerpt 6 shows a mechanical-based LRE in which student B asks student A about the correct spelling for a term, and student A provides him with an incorrect answer.

**Excerpt 6: Mechanical-based LRE – Unresolved (Wrong resolution)**

A: Moreover, eh… If they, if they, eh… to access internet.

B: *¿Cómo se escribe eso?* [How do you write that?] Acc- acc-

A: Acceed. I think is e-e-d.

B: E-e-t.

A: D, d, d.

B: Ah, d.

On the other hand, the second research question dealt with the patterns of interactions students exhibited. Following previous studies (Azkarai & Kopinska, 2020; Basterrechea & Gallardo del Puerto, 2023; García Mayo & Imaz Agirre, 2019); those patterns were classified according to Storch's (2002) taxonomy of pattern styles. These styles were defined according to the parameters of equality and mutuality. On that account, each transcript was assigned a pattern of interaction according to the distribution of control over the task -i.e. equality- and the engagement with each other's contributions -i.e. mutuality- that had taken place. That is, observing whether students distributed the task equally or not, and whether they took each other's ideas into consideration, each dyad was assigned the pattern that represented it the most. The total number of each pattern of interaction per pair

formation method was tallied and the percentages calculated. Four different patterns were identified in the corpus which are summarized in table 2. These were drawn from Storch (2002) as they were the ones that best described the dynamics found in the transcripts.

- Collaborative, when both members contributed to the task equally and engaged with each other's ideas.
- Dominant/dominant, when the control over the task was evenly distributed between both members -because both contributed- but they refused to engage with what the other had to say.
- Dominant/passive, when the control was assumed by one of the participants, while the other took a passive role due to inability to contribute, and the dominant one did not engage with the other person's contributions.
- Expert/novice, when the control was assumed by one of the learners, but invited the other student to participate by integrating their ideas and providing scaffolding.

*Table 2. Combinations of interactional patterns (Storch, 2002).*

|  | Equality | Mutuality | Example |
|---|---|---|---|
| Collaborative | + | + | Excerpt 7 |
| Dominant/dominant | + | - | Excerpt 8 |
| Dominant/passive | - | - | Excerpt 9 |
| Expert/novice | - | + | Excerpt 10 |

The following extracts display the different patterns of interaction found in the data gathered from the transcripts. Excerpt 7 serves as an example of a dyad interacting collaboratively. Both students contribute to the composition of the task and engage in their partner's contributions. The participants combine their partner's ideas with their own (e.g. lines 1-2, 7-8-9) or complete their partner's utterances (e.g. lines 6-7, 12-13). Instances of confirmation requests can also be found (e.g. lines 5, 15) as well as positive feedback (e.g. line 16).

**Excerpt 7: Collaborative pattern (High equality – high mutuality)**

1    B:    It's worth having open Internet… to make easy…

2    A:    To make easier… eh, the task assigned, or…

3    B:    (writes).

4    A:    Okay. Another one.

5    B:    It's worth having open Internet to make easier the task assigned… looking for

|     |     | more information? Or… |
| --- | --- | --- |
| 6   |     | To look for. To look for current information, or- |
| 7   | A:  | (reads the sentence) And search. |
| 8   | B:  | And search current and accurate- |
| 9   | A:  | And accurate information. |
| 10  | B:  | Secondly? |
| 11  | A:  | Secondly… uh… |
| 12  | B:  | Because it's a source of… |
| 13  | A:  | Knowledge. |
| 14  | B:  | Knowledge? |
|     |     | And we could learn about it, and we could choose examples… about it? |
| 16  | A:  | Yeah. |
| 17  | B:  | We could or we can? We can. |
| 18  | A:  | Both. *Pon…*[put…] |
| 19  | B:  | And we could take examples… |
| 20  | A:  | Um, we could add the information …to our subject. |

In excerpt 8, the dyad exhibits a dominant/dominant pattern. Both participants want to control the task but fail to reach a consensus and an understanding of what they are writing. There are explicit peer repairs (e.g. 23-25) that are not accepted by the partner, and there are signs of dispute in the verbal exchange in the form of swear words (e.g. 25, 27).

**Excerpt 8: Dominant/dominant pattern (High equality – low mutuality)**

| 21  | A:  | *Yo es que, yo es que, el conector es el but. Ya no hace falta otro* connector. [I just, I just, the connector is but. There is no need for another connector.] |
| --- | --- | --- |
| 22  | B:  | *Pero es que but como artículo, no sé.* [But but as an article, I don't know.] |
| 23  | A:  | *No, no es un artículo, es un* connector. [No, it's not an article, it's a connector.] |
| 24  | B:  | *Ya, ya, pero como sujeto mal*. [Yeah, yeah, but as a subject it's wrong.] |
| 25  | A:  | But, but… things. Things- *el sujeto es* things. *Déjame el papel, leches*. [The subject is things. Give me the paper, damn it] |
| 26  | B:  | *Quita, no me toques.* [Get off, don't touch me.] |
| 27  | A:  | *Ostia. Ostia, qué tío.* [Jesus, what a guy.] |
| 28  | B:  | *Qué paciencia.* [How much patience.] |

Excerpt 9 features a dominant/passive pattern. Student A takes control over the task, as it is shown in the long monologues she makes (e.g. 33, 41), deciding what needs to be included in the report. Student B takes a passive role, as can be perceived in the short utterances he makes (e.g. 34, 42). He contributes to the task very little since student A interrupts him or does not engage with what B is trying to express (e.g. 29-31). Moreover, student B seems to be frustrated (e.g. 32, 44).

**Excerpt 9: Dominant/passive pattern (Low equality – low mutuality)**

| 29 | A: | The internet have… |
|----|----|--------------------|
| 30 | B: | We- |
| 31 | A: | Thirdly… |
| 32 | B: | (sigh) |
| 33 | A: | *Yo* firstly *pondría* [I would put] the students use the Internet of the school, uh, it's, eh, it's, I think it is good, eh? I think it is good. Firstly, students use or the internet… you have to, to, to put the situation, and the situation is that the students use, uh, the internet, uh, in, at the school. A lot of time, no? Spend a lot of time, no? I think it's, is, is good.. the… the firstly, no? The situation. Because explain why internet access should be given students. |
| 34 | B: | *Ya*. [Right.] |
| 35 | A: | But the situation is the students spend a lot of time with social media. |
| 36 | B: | It don't sense. I don't sense. |
| 37 | A: | Eh? |
| 38 | B: | It don't sense. |
| 39 | A: | Yes. |
| 40 | B: | It don't have a connection. |
| 41 | A: | Ya, ya, ya… [Right, right, right] I, I, I think in, in, in this firstly, secondly, we have to put the situation, no? we have to explain the situation in this moment. And I think, eh… firstly, the second, use the internet a lot of time. Secondly, a ver, secondly… eh…. Um, they have problems to come to, to focus in, on activities, on school activities. Because sometimes they, uh, they have access to internet and it's difficult to, uh, to, to do, eh, other task, other task… *no sé* [I don't know], it's difficult to, to focus on other task or to do other tasks? |
| 42 | B: | Um. |
| 43 | A: | I think thirdly is good. You have to describe the situation. |
| 44 | B: | (sigh) I am lost. |
| 45 | A: | They, they have problems to concentrate, *yo pondría* [I would put] have |

| | | problems to, to focus on. |
|---|---|---|
| 46 | B: | But it's, uh- |
| 47 | A: | Firstly, we have to describe the, the situation and the students spend a lot of time in Internet. Secondly, they have problems to… focus on the task. |

The tenth and final excerpt illustrates an expert/novice pattern. Student A assumes control over the task but attempts to include student B in the discussion, integrating B's ideas and providing explanations (e.g. 54, 56). Student B participates by making tentative suggestions (e.g. 51, 53, 55), repeating the ideas given by student A (e.g. 58) or confirming (e.g. 49, 60).

**Excerpt 10: Expert/novice pattern (Low equality – high mutuality)**

| 48 | A: | Then, we have to make a conclusion. |
|---|---|---|
| 49 | B: | Mm-hmm. |
| 50 | A: | Conclusion. Uh… |
| 51 | B: | In the government, with the government? |
| 52 | A: | What? |
| 53 | B: | If the… local government, uh… were or…? |
| 54 | A: | It's a conditional, so we have to use, like… if the government did, or… no? It's in the past. If the local government… |
| 55 | B: | Did? Or… |
| 56 | A: | Did or some verb in the past. |
| 57 | | Did all… did all of these safety actions, our city would be- |
| 58 | B: | Would be. |
| 59 | A: | A safer place. |
| 60 | B: | Okay. |

With the purpose of addressing the third research question, which dealt with agency and emotions, Li and Zhu's (2017) approach was followed. In order to analyse which type of agency was exercised by students (individual or collaborative agency), the transcripts and the questionnaire responses were scrutinized to find related instances to characteristics of both types of agency reported by previous research: initiative, responsibility and commitment in the case of individual agency, and instruction, debate and mutual understanding regarding collaborative agency (Li & Zhu, 2017; van Lier, 2008). When related instances to any characteristic were found, that characteristic was counted as present. If no examples were identified, the characteristic was counted as absent. Table 3 features the possibilities. To identify collaborative agency and the theme of mutual agreement, responses to

question No. 12 were scrutinized. Mutual agreement was considered to be present when students reported having been able to reach consensus with their partner, and absent when they expressed having difficulties to do so. Moreover, instances of scaffolding, instruction and debate were examined in the transcripts. Excerpts 11, 12 and 13 illustrate examples of said themes:

*Table 3. Criteria used to identify types of agency*

| | Characteristics | | | Examples | | |
|---|---|---|---|---|---|---|
| Individual Agency | Initiative | Responsibility | Commitment | Excerpt 14 Initiative | Excerpt 15 Responsibility | Excerpt 16 Commitment |
| Collaborative Agency | Instruction | Debate | Mutual agreement | Excerpt 11 Scaffolding and Instruction | Excerpt 12 Debate | Excerpt 13 Mutual agreement |

**Excerpt 11: Collaborative agency - Scaffolding and instruction**

A: It is said, or… in our knowledge, very informal, in our knowledge…

B: In our-

A: Yes, in our knowledge.

B: Like this? In hour?

A: No, our. O-u-r (spelling it out). *Nuestro* [Our].

B: Ah, yes. Our…

A: Yes. Knowledge. K-n-o-w-l-e-d-g-e (spelling it out). *Eso es* [That's it].

**Excerpt 12: Collaborative agency - Debate**

B: Describing the… *el propósito* [the purpose]. *Ahora, los puntos que vamos a tratar.* [Now, the points we are going to cover]. *Esto también en la introducción, eh?* [This also in the introduction, eh?] We're still are in the introduction, okay?

A: Yes.

B: And this is the purpose , we have to write the principal points of the report.

A: No, but I'm saying in the body…

B: Yeah?

A: We don't need a headline?

B: *Pero todavía no estamos en el* body [But we're still not in the body].

A: *Ya, ya, pero digo,* [Yeah, yeah, but I mean] subheading. *No se necesitaba un, como…*[Didn't we need like a…]

B; *Un título*? [A title?]

A: *Sí* [Yeah]*.* A subheading?

B: *Pero continuamos con la introducción, que todavía queda.* [But we continue with the introduction, there is still more to write].

A: *Vale, es que no sé… es que en la introducción era* introduction, *pero…* [Okay, I don't know... it's just that in the introduction it was introduction, but…]

B: *Pero el* purpose… [But the]

A: *Sí, pero digo en cuanto al título…*[Yeah, but I mean the title]

B: *Pero tú en un informe no pones introducción.* [But you don't put an introduction in a report].

A: *Ya, vale, es verdad, sí.* [Yeah, okay, that's true, yes]

B: *Tu pones, osea, sabes que es una introducción*. [You put, I mean, you know it's an introduction]

A: Okay.


**Excerpt 13: Collaborative agency - Mutual agreement**

*In task 1, what happened if you and your partner disagreed on something? How did you act when this happened and why? And in task 2?*

"En ambos casos lo debatíamos sin ningún problema y siempre llegábamos a una respuesta conjunta." [In both cases we discussed it without any problem and always came to a joint answer]


On the other hand, the transcripts also served as a way to identify the theme of initiative, a notion related to individual agency which is described by van Lier (2008) as the contribution a student makes by adding something new to the discussion; other themes associated to individual agency - commitment and responsibility- were analysed in the students' responses to the questionnaire (questions 12-14). Instances of said characteristics are displayed in the following excerpts:


**Excerpt 14: Individual agency - Initiative**

B: *Lo que podemos poner es que Internet- o sea que por lo general-* [What we can put is that the internet- I mean, that in general]

A: *Ya, ya.* [Yes, yes]

B: *Hay algunos que lo utilicen para otras cosas.* [There are some that will use it for other things]

A: Ah, it's used to… it's used-

B: In general, Internet is used to search information, but some people use, use it to, eh, social medias, to watch videos and plays. Eh, so we give you a recommendation that is to install, for example, a *cortafuegos, como una aplicación que te prohiba, osea que no te deja acceder-* [firewall, like an app that blocks you, I mean, that it won't let you access]

A: *Ya, ya*. [Yes, yes]

B: *O una aplicación con la que tu profesor controla tu pantalla.* [Or an app with which your teacher controls your computer screen]

**Excerpt 15: Individual agency - Responsibility**

*What qualities would you look for in your ideal partner to get the writing done? Why?*
"Que sea responsable y que aporte, pero escuchando." [I want them to be responsible and to contribute, but listening]

*Would you say you demonstrated said qualities in task 1? And in task 2? Include examples of how you demonstrated them.*
"Creo que en los dos casos las hemos demostrado." [I think in both cases we have demonstrated them]

**Excerpt 16: Individual agency - Commitment**

*What qualities would you look for in your ideal partner to get the writing done? Why?*
"En situación de aprendizaje, cualquiera que acepte la tarea y saque lo mejor de sí mismo." [In a learning situation, anyone who accepts the task and brings out the best in him/herself]

*Would  you say you demonstrated said qualities in task 1? And in task 2? Include examples of how you demonstrated them*.
"Creo que sí." [I think so]

On the other hand, students' emotions were studied drawing on Li and Zhu (2017). Analysing the responses given by the students, these were coded as either being positive, negative or both if the pair had expressed both positive and negative emotions (questions 10-11). All the data obtained -type of agency and emotions- was tallied and percentages calculated, to observe the frequency of each type of agency and emotion per pair formation method. The data regarding emotion was then compared to the types of agency.

After tallying the data regarding the production of LREs, patterns and agency, a t-test for independent samples was run to observe if there were any significant differences between the two pairing conditions (TS and SS). No statistically significant difference was found between TS and SS in the case of patterns and agency. Concerning the production of LREs, only the contrast found in the production of unresolved F-LREs was statistically significant ($t$ = 2.266; $p$-value = 0.039).

The last research question sought to elicit students' views on CW and its usefulness for EFL learning, as well as their perceptions of the pair formation method. For that purpose, qualitative data

were gathered from the open-ended questions of the questionnaire, particularly, those pertaining to part 2 (questions 4-9) and part 4 (questions 15-17) of the questionnaire. Regarding their general views on CW, participants' responses were coded according to themes that arose, and placed under the categories of *weaknesses* and *strengths*, since the themes reflected positive and negative aspects of CW. In order to arrange the responses in which participants had to express their preference for writing collaboratively or individually, data were coded as *individually, collaboratively* or *both*, and percentages calculated. Students' views on the usefulness of CW for EFL learning were coded according to the identified themes. Regarding the questions in which students had to respond which pair formation condition they preferred as well as which condition helped the quality of their written work more, data were coded as *teacher-selected (TS)*, *student-selected (SS)* or *indifferent*, and then, percentages calculated over the total number of participants. Five of the sixteen answers were discarded as invalid, since the question was not responded appropriately (i.e. they answered "yes" or "no" instead of choosing one of the options).

*Table 4. Coding system for the analysis of students' perceptions*

| Analysed aspect | Coding | | |
|---|---|---|---|
| General views on CW | Strengths | Weaknesses | |
| Individual vs CW | Individually | Collaboratively | Both |
| Pairing conditions / Preference and quality of compositions | TS | SS | Indifferent |

## 4. RESULTS

### 4.1. Pair formation method and the frequency, nature and outcome of LREs

*Table 5: Distribution of LREs per pairing method.*

| | LRE frequency and percentage | | Resolved outcome frequency and percentage | |
|---|---|---|---|---|
| | Teacher-Selected (n=9) | Student-Selected (n=8) | Teacher-Selected | Student-Selected |
| F-LRE | 32/109 29.36% | 38/121 31.40% | 25/32 78.12% | 26/38 68.42% |
| L-LRE | 51/109 46.79% | 60/121 49.59% | 40/51 78.43% | 31/60 51.66% |
| M-LRE | 26/109 23.85% | 23/121 19.01% | 22/26 84.61% | 20/23 86.96% |

The aim of the first research question was to analyse whether the pair formation method exerts influence on the frequency, nature and outcome of LREs. Table 5 shows the data collected for this purpose structured according to the frequency, nature and outcome of the LREs that were produced. With reference to the frequency, results revealed that slightly more LREs were produced by SS pairs than TS pairs; SS dyads (n=8) produced 121, whereas TS learners (n=9) generated 109. Regarding the nature of the LREs, in both cases, lexis-based LREs were the most prevalent type, accounting for almost 50% of the LREs produced (46.79% in TS dyads and 49.59% in SS groups). The second most frequent type in both conditions were form-based LREs, amounting to 29.36% in TS and 31.40% in student-selected pairs. M-LREs were the least frequent in both pairing conditions with the SS setting producing the lowest percentage of M-LREs (ST 19.01% and TT 23.85%).

As for the outcome of the LREs, it was found that the TS condition produced a higher proportion of resolved episodes than the SS one (79.82% and 63.64%, respectively). This dissimilarity is especially noticeable regarding the production of resolved lexis-based LREs (78.43% and 51.66%, respectively), but it can also be observed in the percentages of resolved form-based LREs (78.12% and 68.42%, respectively).

In essence, there were not very broad differences between the two pairing conditions but results show that SS dyads tend to produce more LREs than TS pairs, while TS dyads are also likely to generate more resolved episodes. Regarding the nature, lexis-based LREs are the most frequent type in both conditions, followed by form-based LREs and lastly, mechanical-based LREs.

### 4.2.    Pair formation method on patterns of interaction

*Table 6. Patterns of interaction (Storch, 2022) per pair formation method.*

|      | Collaborative | Dominant/dominant | Dominant/passive | Expert/novice | Total |
|------|---------------|-------------------|------------------|---------------|-------|
| TS   | 5<br>55.56%   | 1<br>11.11%       | 0<br>0%          | 3<br>33.33%   | 9     |
| SS   | 6<br>75%      | 0<br>0%           | 1<br>12.5%       | 1<br>12.5%    | 8     |

The second research question sought to shed light on the impact pairing conditions may have on patterns of interaction among EFL students, by analysing pair talk in the transcripts. As Table 6 illustrates, the collaborative pattern was the most common dynamic manifested by the pairs from each condition, amounting to 55.56% (n=5) in the case of TS and 75% (n=6) in the case of SS groups. In regard to the remaining patterns of interaction, expert/novice was the second most recurrent dynamic among TS pairs (n=3, 33.33%), being three times the number of pairs exhibiting this dynamic among

SS dyads (n=1, 12.5%). Regarding the dominant/dominant pattern, only one TS dyad exhibited it (11.11%) whilst there were no instances among SS pairings. Conversely, only one SS dyad displayed a dominant/passive dynamic (12.5%), and no pair under the TS condition presented it.

Summarising, most of the dyads followed the collaborative pattern at a high distance, all the rest of the combinations represented 25% of the patterns of interaction in the SS and approximately 45% in the TS.

## 4.3. Agency and emotions regarding the pair formation method

*Table 7: Characteristics of individual and collaborative agency per pair formation method.*

| | | TS (n=9) | SS (n=8) |
|---|---|---|---|
| **Individual agency** | **Initiative** | 9/41 | 8/33 |
| | | 21.95% | 24.24% |
| | **Responsibility** | 6/41 | 3/33 |
| | | 14.63% | 9.09% |
| | **Commitment** | 4/41 | 2/33 |
| | | 9.76% | 6.06% |
| | **All individ/Total** | **19/41** | **13/33** |
| | | **46.34%** | **39.39%** |
| **Collaborative agency** | **Instruction** | 8/41 | 7/33 |
| | | 19.51% | 21.21% |
| | **Debate** | 6/41 | 6/33 |
| | | 14.63% | 18.18% |
| | **M. Under.** | 8/41 | 7/33 |
| | | 19.51% | 21.21% |
| | **All collab/Total** | **22/41** | **20/33** |
| | | **53.66%** | **60.60%** |

The third research question attempted to elucidate students' expression of agency and emotions and to observe whether any differences can be perceived between the two pairing conditions. Table 7 illustrates the number and percentage of groups that exercised the characteristics of each type of agency (collaborative and individual) identified in the corpus.

Almost all pairs exercised collaborative and individual agency during the writing tasks, except for one SS pair, which only manifested individual agency. Although both types of agencies were present in the rest of the dyads, these were not manifested to the same degree (see table 7); TS dyads (46.34%) manifested slightly more traits of individual agency than SS learners (39.39%). However, the contrast

is not particularly broad, and even less so regarding collaborative agency, as the themes of instruction and mutual understanding were identified in almost all TS and SS pairings, as well as the theme of debate to a lesser degree. On the other hand, dyads from the TS condition exhibited individual and collaborative agency almost in similar proportions (46.34% and 53.66%), whereas SS pairings manifested collaborative agency (60.6%) to a greater extent than individual agency (39.39%).

*Table 8: Reported emotions per type of agency and pair formation method.*

|  | SS (n=8) | TS (n=9) | Agency |
|---|---|---|---|
| **Positive only** | 0 | 0 | Individual only |
|  | 0 | 0 | Collaborative only |
|  | 6/8<br>75% | 5/9<br>55.56% | Both |
| **Negative only** | 0 | 0 | Individual only |
|  | 0 | 0 | Collaborative only |
|  | 0 | 0 | Both |
| **Both** | 1/8<br>12.5% | 0 | Individual only |
|  | 0 | 0 | Collaborative only |
|  | 1/8<br>12.5% | 4/9<br>44.44% | Both |

Table 8 illustrates the emotions students reported they felt during the writing tasks, data which was gathered from their responses to questions No. 10 and 11 from the questionnaire. The data show that most groups recounted feeling positive emotions only. When it comes to the pair formation conditions, the percentage of SS pairings reporting positive emotions only was higher than the one of TS dyads (75% and 55.6%, respectively). Among the responses given, the positive emotions that were detected were the following: tranquillity ("I felt calm, because I knew the structure better and my partner had a better control over the language"), satisfaction ("I feel satisfied because I think we did a good job"), trust ("I felt okay because I trusted him"), comfort, relief, expectation, confidence and happiness.

On the other hand, no group from either condition reported negative emotions exclusively. However, there were instances of pairings that had reported experiencing positive as well as negative emotions. In this case, mixed emotions were experienced more under the TS condition (44.4%) than the SS condition (25%). The negative emotions identified in the students' responses were the following: worry ("I was concerned about getting it right"), frustration ("A bit annoyed because I felt he delegated everything to me"), uncertainty, inhibition, shame and boredom. Among the students that reported positive and negative emotions, one learner expressed that before the task he felt "a bit self-conscious because I tend to take control and I didn't want him to feel I was bossing him around" but that when

the task was done, he felt "satisfied because we were in tune with each other, even though I did not express everything I wished to say".

Observing the relation between agency and emotions, results revealed that among the dyads that had expressed both types of agency (collaborative and individual), 11 pairs had reported feeling positive emotions exclusively, whereas 5 had reported feeling both positive and negative emotions. On the other hand, the pair that had only manifested individual agency also reported mixed emotions.

To sum up, results show that most pairs exercised individual and collaborative agency during the tasks, regardless of the pair formation condition they were placed in. However, SS pairs exhibited collaborative agency to a higher degree than individual agency, whereas TS dyads manifested each type of agency in a more balanced way. Regarding the emotional dimension, most dyads reported positive emotions exclusively. The remaining pairings reported feeling both positive and negative emotions; the pairs that experienced mixed emotions represented a bigger proportion of TS dyads than SS groups. Finally, most of the pairs that exercised both types of agency experienced positive emotions only, but a fewer number of them reported mixed emotions. The only pair that manifested individual agency exclusively, which was SS, reported mixed emotions as well.

### 4.4.    Students' attitudes on CW and pair formation method

The objective of the fourth and last question was to enquire participants about their views on CW and its usefulness for EFL learning, as well as their thoughts on the pair formation conditions they had been placed in. As previously mentioned, all participants except for two wrote collaboratively in both conditions, TS and SS.

*Table 9. Reported strengths and weaknesses of CW.*

| Strengths | | Weaknesses | |
|---|---|---|---|
| Reasons | Frequency and percentages | Reasons | Frequency and percentages |
| Pooling of knowledge | 8 50% | Disagreement | 4 26.6% |
| Mutual understanding | 3 18.75% | Pace | 3 20% |
| Assistance | 2 12.5% | Distraction | 2 13.3% |
| Productive activity | 1 6.25% | Giving in | 2 13.3% |

| Trust | 1<br>6.25% | Anxiety/stress | 1<br>6.6% |
| Sharing experiences | 1<br>6.25% | Distribution of control | 1<br>6.6% |

Table 9 illustrates what students liked and disliked about the experience of writing collaboratively. Their responses revolved around 6 main strengths. 50% of the students expressed CW was considered advantageous to share and combine each other's ideas and knowledge. Three of them (18.75%) acknowledged that they had had good communication and mutual understanding. The idea that CW allowed people to help their partners when they had doubts was commented on by two people (12.5%). Finally, three people shared three ideas of their own: (1) that the activity was a productive one because working with a partner facilitated the task, (2) that when there is trust among pair members the writing goes smoothly, and (3) that writing collaboratively allowed them to share experiences.

Regarding the weaknesses of CW, 3 of the students (18.75%) did not report any dislikes about the experience. Among those who did (13 participants), the most frequent reason given (26.6%) was that there were times in which it was difficult to reach a consensus and unify criteria. The second most mentioned theme (20%) was that it took much longer to get the writing done since reaching a consensus took time. Two people (13.3%) stated that working with a partner was more distracting than doing it individually, and another two students (13.3%) acknowledged that when working collaboratively it is sometimes necessary to renounce one's own ideas to accept others'. One student (6.6%) admitted that writing with a partner triggered his anxiety and cause him stress, and another one (6.6%) reported that it was difficult for him not to impose his ideas on others and take full control over the task.

*Table 10. Writing individually vs writing collaboratively.*

|  | Individually | Collaboratively | Both |
| --- | --- | --- | --- |
| Frequency and percentages | 7<br>43.75% | 5<br>31.25% | 4<br>25% |

When students were asked about whether they would rather write individually or in pairs (Table 10), seven of sixteen learners (43.75%) preferred to do it on their own, as they would concentrate better and it would take less effort. On the other hand, five participants (31.25%) favoured CW, some reasons being that it boosted learning and allowed students to assist each other. There were, however, four participants (25%) that expressed liking both options, since each brought its own

set of advantages. For instance, one learner reported that writing individually would allow her to prepare herself for the official exam, whereas writing collaboratively would prompt her to consolidate knowledge and absorb ideas. These results showed that even though participants held positive views about the experience, a considerable number of them still prioritized individual writing over CW.

*Table 11. Usefulness of CW for EFL development.*

| Writing skills | | Grammar | | Vocabulary | |
|---|---|---|---|---|---|
| *Reasons* | *Frequency and percentages* | *Reasons* | *Frequency and percentages* | *Reasons* | *Frequency and percentages* |
| Pooling ideas | 8 53.3% | Pooling knowledge | 5 33.3% | Pooling knowledge | 6 40% |
| Practice | 4 26.6% | Practice | 4 26.6% | Consolidation | 3 20% |
| Assistance | 2 13.3% | Assistance | 3 20% | Practice | 3 20% |
| Reminder | 1 6.6% | Reminder | 2 13.3% | Reminder | 2 13.3% |
| | | Visualization | 1 6.6% | Learning | 1 6.6% |

Aside from their general views on CW, participants were asked to offer their perception of the value of CW for EFL learning. Fifteen people responded that CW was very useful for the development of grammar, vocabulary and writing skills, while one person reported not having an opinion (see Table 11).

Regarding its benefits for writing skills, four themes were identified. Over half of the respondents (53.3%) commented that it allowed students to combine their writing abilities and share their knowledge about the structure of the writing. The second most referenced idea (26.6%) was that it allowed them to put the knowledge they had about the structure into practice. Two people (13.3%) reported that it had been beneficial in that they were assisted by their partners when they had doubts. One student (6.6%) stated that it had helped him remember the structure of the writing.

Concerning grammar, the most commented factor (33.3%) was that the usefulness of CW relies on the fact that it makes space for students to share their grammar knowledge with each other. Another frequent reason given (26.6%) was that they had had the opportunity to practice the challenging grammar they had learnt in class. Three respondents (20%) acknowledged that they were helped by their peers when they had doubts or made a mistake. Two people (13.3%) reported that it

had served as an opportunity to remember grammatical structures and one (6.6%) commented that it was of great help because the lesson given to prepare them for the tasks had given her a visual image of how the necessary grammatical aspects had to be included in the text.

When it comes to vocabulary, 40% of the respondents (n=6) expressed that CW had been beneficial in that they had combined their vocabulary repertoires which allowed them to learn new terms. Three learners (20%) stated that writing collaboratively was useful because it encouraged them to apply the terms they knew, giving them new forms or layers of meaning. Another 20% of the participants (n=3) commented that the writing tasks had helped them consolidate the vocabulary they were familiar with. Moreover, two people (13.3%) referred to the fact the CW had allowed them to retrieve vocabulary terms from their mind -i.e. the tasks prompted them to remember the terms they had previously learnt- and one person (6.6%) acknowledged that even the prompts they were given for the tasks had exposed them to new vocabulary.

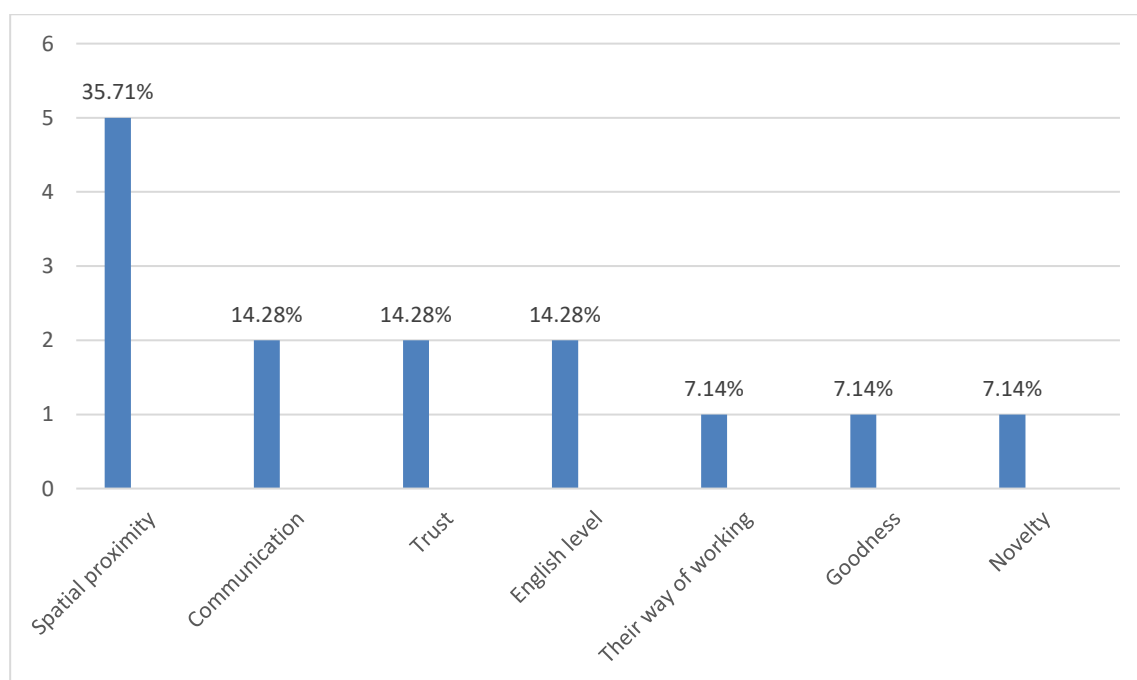*Figure 1. Reasons for partner selection.*



*Table 12. Students' views on the two pair formation methods.*

|  | Teacher-selected | Student-selected | Indifferent |
|---|---|---|---|
| Condition preference | 6 <br> 37.5% | 6 <br> 37.5% | 4 <br> 25% |
| Quality of written production | 3 <br> 27.27% | 4 <br> 36.36% | 4 <br> 36.36% |

Finally, participants' views on the pairing conditions they had experienced were explored (Figure 1 and Table 12). Regarding the motives for which participants chose their partners (Figure 1), 35.71% of students (n=5) reported that they had chosen their partner because they were seated next to them. 14.28% (n=2) of the respondents said that they selected their partners because they had good communication with them. Two people (14.28%) reported that trust was the reason for their choice while two other students (14.28%) primed their peers' good English level. Finally, one respondent reported choosing his partner because he worked well -i.e. he knew how to manage the task-, another student acknowledged that he chose his partner because he thought he was "a good person" (7.14%) and another one responded that she had not worked with that person before (7.14%).

When asked about their future preferences, there was no clear inclination toward one of the pair formation conditions. Both TS as well as SS conditions were favoured by 37.5% of respondents (n=6 each). A quarter of learners (25%) reported that they did not mind which. Finally, regarding which pairing condition resulted in higher quality texts, there were no broad differences between the options (n=9). Four of the respondents (36.36%) believed that the writing they had done with the partner they had chosen was better in quality than the one they had composed with their assigned partner. Another four students (36.36%) considered that the two writing tasks they had composed were equally well written. Finally, the remaining three of the participants (27.27%) felt they had composed a better text with the partner assigned by the teacher.

In essence, results show that students held a positive view of the experience and, except for three participants, most believed that CW has also its set of disadvantages. Regarding their preference, a considerable number of respondents favoured individual writing over CW. Concerning the usefulness of CW for EFL learning, almost all respondents considered that it brought different kinds of benefits to enhance their writing skills, vocabulary and grammar knowledge. Moreover, no particular inclination toward one of the conditions was observed, and most participants considered that their written quality had been better with the partner they chose or that both compositions made with different conditions had been equal in quality.

To sum up, findings seem to indicate that the pair formation method (TS and SS conditions) influences the production of LREs when it comes to their frequency and outcome. Regarding the patterns of interaction, TS dyads displayed a wider variety of dynamics that SS pairs. Moreover, although some differences were found, pairing conditions appear not to have a considerable effect on the types of agency exercised by participants and the presence of one or both types of agency did not seem to have an impact on the types of emotions experienced by the students. On the other hand, it was found that the TS condition had more reports of mixed emotions than SS pairs. In regard to students' views, CW was considered a rewarding experience by participants, but downsides were

reported and many expressed preferring individual writing over CW. Almost all respondents considered CW beneficial for EFL development, and it was found that, overall, there was no pairing condition favoured the most by participants.

## 5. DISCUSSION

This study investigated the impact of pair formation method on LREs, patterns of interaction, agency and emotions. Students' views on CW, its benefits for EFL learning and pairing conditions were also studied. The findings appear to indicate that the way pairs are formed may have an influence on the LREs produced and the patterns of interaction, as well as students' enactment of agency and their emotions. Results also reveal that while CW was perceived as a positive experience and asset for EFL learning, most participants expressed concerns and many preferred to write individually.

Regarding the influence of pair formation method on the frequency, nature and outcome of LREs, mixed results were obtained: there was no effect on the nature of the LREs produced whereas the outcome and the frequency of LREs seemed to be affected. Results showed that pairs from both pairing conditions produced more lexis-based LREs than form-based or mechanical-based LREs. These findings contrast previous research done on the same population -adult EFL leaners- integrating pair formation method (Mozaffari, 2017), which revealed that students pay attention to grammar and vocabulary to a similar degree. One aspect that may explain this discrepancy between findings is the topics used for the tasks of this study. While the topic featured in the second task was more generic - use of the Internet in the classroom-, the theme selected for the first task was related to crime, which is a vocabulary unit that participants had worked on weeks prior to the study. As such, the topic of the task may have encouraged students to deliberate more about vocabulary terms than other language-related aspects. A close inspection into the pair talk revealed that many lexis-based LREs produced in the first task revolved around terms related to crime, as students discussed about the use of words such as "robbery", "vandalism" and "sexual aggression".

On the other hand, a difference between the pairing conditions was attested as regards to the number of episodes created; SS pairs produced more episodes than TS ones. These findings differed from the ones obtained in previous studies on CW (Basterrechea & Gallardo del Puerto, 2023; García & Imaz, 2019; Mozaffari, 2017), in which it was found that the SS condition produced significantly fewer LREs than the TS or proficiency-matched ones. In these studies, it was reported that SS pairs had displayed more off-task behaviour than the rest of the pairings. Mozaffari (2017) suggested that the lower focus on language among SS pairs may be due to the fact that friendship was the only criterion used by learners to select their partners, a connection that has been further observed in subsequent research (García & Imaz, 2019). Contrary to students in the study by Mozaffari (2017), our learners did

not choose their partners following that sole criterion, but for other motives such as spatial proximity, communication and the peer's level of English. Therefore, the fact that our SS pairings did not choose their partners due to pre-existing friendship could explain why their number of LREs -and thus, their language focus- was not lower than that of TS dyads.

Finally, analysis of the resolution of the LREs revealed that TS pairs produced more correctly resolved LREs than SS dyads, especially in the case of lexis-based LREs. This aligns with previous studies on CW, which showed that proficiency-paired (Basterrechea & Gallardo del Puerto, 2023) and TS dyads (Mozaffari, 2017) produce more resolved LREs than SS pairings. These results, therefore, seem to indicate that regardless of the amount of deliberation on language, students are more likely to reach the correct solutions when they are placed in pairs by the teacher than when they select their partners.

Regarding the second research question, which dealt with patterns of interaction, results match previous research (García Mayo & Imaz Agirre, 2019; Mozaffari, 2017) in that the collaborative pattern was the dynamic that predominated in both pairing conditions. However, TS pairings exhibited a wider variety of patterns of interaction, the expert/novice pattern being the second most displayed dynamic. One possible explanation for these results may lie in the criteria followed to arrange the TS pairings. Given that the criterion was that of the teacher's knowledge about learners' personalities, the pairings were formed so that students would complement each other. As such, the arrangements could have set the appropriate conditions for dyadic dynamics such as the expert/novice pattern to arise. The two patterns of interaction that accounted for almost all pairs in this study -i.e. collaborative and expert/novice- have been reported to be favourable for language learning (Storch, 2002). Bearing that in mind, it could be of interest for future studies to examine how teachers' criteria for pair formation method may impact dyadic dynamics in the classroom.

Observing the findings obtained concerning the production of LREs and patterns of interaction, some correlation between both aspects was detected. Dyads under the SS condition were more collaborative and produced more LREs than TS pairs. This aligns with previous studies (Storch & Aldosari, 2013; Watanabe & Swain, 2007), which revealed that the collaborative pattern is the dynamic with the highest frequency of LREs. On the other hand, TS producing more accurate resolutions than SS while displaying a wider variety of patterns also matches results from previous research. Basterrechea and Gallardo del Puerto (2023) found that the collaborative and expert/novice patterns produce more target-like resolutions than other patterns, and that expert/novice pairs are more accurate than collaborative dyads in their deliberations, particularly in form-focused LREs.

With reference to the third research question, this study examined whether the pair formation method influenced students' manifestation of agency and emotions. Findings revealed that although almost all dyads had exercised both types of agency, TS dyads exhibited individual and collaborative agency in a more balanced manner than SS learners, who showed a higher tendency toward

collaborative agency than individual agency. This disparity between pairing conditions may be due to the dyadic dynamics that took place during peer interaction. In their study, Li and Zhu (2017) observed that patterns of interaction may be linked to the types of agency exercised by students, as the "collective pattern" found in the corpus was tied with collaborative agency, whereas a pattern they identified as "dominant/defensive" was linked to individual agency. With this in mind, the wider variety of patterns in the TS condition may have played a role in the manifestation of their agency, given that they showed more traits of individual agency than SS pairs, which were more collaborative. However, this observation must be made tentatively, since (1) our sample size was small and (2) this study did not examine the relation between patterns of interaction and students' agency.

Regarding the connection between emotions and the pair formation method, results revealed that although a considerable number of dyads reported positive emotions exclusively, more mixed emotions were experienced by students when they were paired by the teacher than when they chose their partners.  A closer inspection of the data revealed that some of the negative emotions reported by learners when placed in the TS condition were "inhibition", "worry" and "shame". In view of this, a possible explanation for the reported mixed feelings may be that students did not have a high level of trust or closeness with the partner they were put with. Similar negative effects have been reported in previous literature (Chen & Yu, 2019; Storch, 2005), as participants expressed feeling insecure about their English skills (Storch, 2005) or worried of hurting others with their feedback (Chen & Yu, 2019).

When it comes to the interplay between agency and emotions, previous research (Li & Zhu, 2017) has revealed that collaborative agency is related to positive emotions, whereas the absence of it can give rise to negative emotions. Findings from this study seem to contradict this observation; even though the only pair which did not exhibit collaborative agency reported negative emotions, some dyads that exercised both types of agency expressed feeling negative emotions as well. However, it was observed that most negative emotions expressed by students that had enacted both types of agency were more inner-directed than a consequence of interacting with their partners. That is, rather than feeling negative emotions towards their peers, most participants were worried about their performance or what their partners would think about them. Thus, it may be the case that the presence of collaborative agency diminishes the likelihood of other-directed negative emotions.

The final research question aimed at elucidating students' views on CW, its impact on EFL learning and their preferences regarding the pair formation method. Analysis of the responses given by participants showed that they generally regarded CW as a positive experience which brought many benefits, although many of them also reported the disadvantages that writing collaboratively may bring. On the positive side, parallel to our results, previous research on students' views (Fernández Dobao & Blum, 2013; Shehadeh, 2011; Storch, 2005) revealed that participants tend to show a positive attitude toward CW for the gains that it brings; one of the most shared opinions by participants is that

CW allowed them to exchange ideas and pool resources (Chen & Yu, 2019; Fernández Dobao & Blum, 2013; Storch, 2005). On the other hand, the concerns that have been voiced in previous studies (Chen & Yu, 2019; Storch, 2005) and in our study relate to difficulties to reach a consensus when there was a disagreement, they had a harder time concentrating and they were afraid of appearing too dominating. Nevertheless, the number of participants sharing concerns was significantly higher in this study comparing to previous ones. Given that learners belonged to different generations (ages 16-68), their educational background may have influenced their outlook, since previous research (Storch, 2005) has shown that students may express reservations regarding CW because they view writing as an individual activity.

Apart from participants' general views on CW, this study also examined students' preference between individual and collaborative writing. Previous studies that analysed this matter (Fernández Dobao & Blum, 2013; Shehadeh, 2011; Storch, 2005) showed that most students favoured CW over individual writing, and those who preferred individual writing were a minority. Results obtained in this study contradict those findings, as a considerable number of participants expressed preferring individual writing more than CW. This discrepancy may be explained by the fact that very few participants expressed concerns in those studies, whereas learners who took part in this study were more vocal about the disadvantages of CW. Moreover, the context in which the studies took place may have contributed as a factor. Previous studies in which students showed evident preference toward CW were conducted in undergraduate courses; by contrast, this study was carried out in an official language school, which may signify that the course participants were attending had an instrumental value that may have influenced their views on this matter. Moreover, given that the school is not part of regular education, they may have been more individually driven than students attending other institutions.

Another aspect that this study sought to analyse was students' perceptions toward CW regarding its usefulness for EFL development. Despite voicing the downsides of writing collaboratively and many preferring individual writing over CW, results revealed that participants still viewed CW as a positive asset for language learning, particularly in vocabulary, grammar and writing skills. These findings are in line with previous studies (Chen & Yu, 2019; Fernández Dobao & Blum, 2013; Shehadeh, 2011), in which it was shown that students were able to perceive and appreciate the favourable circumstances that CW brings for improving one's own vocabulary and grammar knowledge (Fernández Dobao & Blum, 2013) as well as writing skills (Chen & Yu, 2019; Shehadeh, 2011).

Students' motives to choose their partners were of diverse nature, including spatial proximity, communication, trust and the student's English level. This contrasts previous research (García Mayo & Imaz Agirre, 2019; Mozaffari, 2017) that surveyed participants about their selection criteria and highlighted friendship as their main justification. This difference may be explained by the fact that

students did not seem to be socializing with each other outside of class as much as they would have had they been in another educational context. When it comes to learners' preference toward the pairing conditions, the study found that there was not a significant inclination toward one of them. A closer inspection of the responses given by students revealed that some students preferred to have their partner assigned by the teacher because "it is fairer" and "this way I will work with whoever the teacher thinks I can work best with". Those who favoured having the option to choose their partner expressed that "it allows you to work with the person you are most in tune with" (i.e. someone with whom you can have mutual understanding) and that this way "I will work with the person who I think can benefit me the most for the final exam".

Finally, findings showed that the quality of the compositions had been regarded to be slightly higher with SS pairs than TS ones, or that the compositions made under both pairing conditions had been similar in quality. Students who considered that their best composition was made under the TS condition expressed that "the difference in ideas and ways of expressing ourselves was more different" and because "I got a good student". Learners who believed their composition was better when they did it with the partner they chose reported that "the exchange of information went more smoothly and quicker", "I was more in tune with that person" and "I was more motivated".

## 6.   CONCLUSION

The purpose of the current study was to investigate the way in which pair formation method (teacher-selected and student-selected) may influence the quantity, nature and outcome of LREs produced by EFL learners, as well as the patterns of interaction that emerge during CW, students' agency and emotions. It also sought to elucidate students' views on CW, its benefits for EFL learning, and pair formation method.

The current study has expanded previous research on the effect of pair formation method on CW tasks. Data showed that while the pairing method does not have an impact on the nature of the LREs produced, it seems to influence the frequency and resolutions of those deliberations. While mirroring previous findings (García Mayo & Imaz Agirre, 2019; Mozaffari, 2017), SS pairs deliberated more on language than TS dyads and TS learners were more likely to resolve doubts about language use correctly. It seems that as Mozaffari (2017) concluded, students' criteria for selecting their partners can impact the frequency of LREs and resolution of LREs and pre-existing friendship among SS pairs could lead to less focus on language; this study has shown that when students choose their partners based on different criteria (e.g. instrumental motives), there are deliberations about language. On that account, more research is needed to further observe whether students' criteria influence the production of LREs in regard to their quantity as well as quality.

Findings also revealed that peer dynamics tend to be collaborative regardless of the pairing condition students were placed in, but unlike in other studies (García Mayo and Imaz Agirre, 2019; Mozaffari 2017) it was also observed that pairs which were formed according to the teacher's criteria exhibited a wider variety of patterns of interaction, the expert/novice pattern being the second most common dynamic. As discussed in discussion section, this contrast may be due to the criteria used in this study for TS pairs. The fact that a considerable proportion of TS pairs displayed the expert/novice pattern when in previous studies TS dyads had been mostly collaborative, indicates that more research should be made to further examine the impact of pairing method -and particularly, the TS condition- in peer dynamics.

In addition, this study examined students' agency and emotions, concepts that have been considerably unexplored in CW research. Results obtained seem to indicate that pair formation method may have an effect on students' agency, SS pairs inclined more toward collaborative agency than individual agency, whereas the presence of the two types of agency in TS pairs was more balanced. Due to the scarcity of studies investigating these two aspects (types of agency and pair formation method), further research is needed to assess their connection. When observing the relation between pairing conditions and emotions, it was found that students experienced more mixed feelings in TS dyads than in SS pairings. Contradicting previous research (Li & Zhu, 2017), it was also found that the presence of collaborative agency does not necessarily hinder negative feelings. However, it may diminish the emergence of other-directed negative emotions. Given that the relation between these two components remains obscure, further work needs to be done to examine the interplay between agency and emotions.

Finally, this study has also contributed to elucidating students' views on CW, EFL learning and pair formation method. Data obtained showed that whilst CW was generally regarded as a positive experience that can bring many benefits for EFL learning, a considerable number of participants still preferred to write individually, an opinion that might have been shaped by the educational context learners were in. It was also found that, in order to select their partners, students followed different criteria to the one reported in previous literature (García Mayo & Imaz Agirre, 2019; Mozaffari, 2017), and students' preference toward pair formation method was equally distributed between the two pairing conditions used in this study (SS and TS).

The findings of this research have considerable pedagogical implications. One of said conclusions is that CW has great potential in FL classrooms. Working collaboratively gives students the opportunity to learn from each other and assist others, making the learning process student-centered, and thus, meaningful. Moreover, constructing a written composition jointly is regarded by students as an activity that could help them in their EFL development. Students perceive it positively; previous

research has shown that their disposition can have an impact on task engagement, which in turn influences how learners perform (Hiromori, 2021).

In order to make CW as fruitful as possible, teachers should reflect on pairing arrangements when implementing these tasks; the criteria followed to form them should also be weighed, as they could play a factor in the language use and peer dynamics that occur during collaborative activities. Furthermore, data obtained in this study revealed that students believe CW has its own set of disadvantages that may hinder their performance. On that account, it would be advisable to train students for collaborative tasks, by implementing activities that could help them develop skills that would prepare them better, and minimize those drawbacks in the process. For instance, making learners work on their negotiation and task management skills could potentially reduce the issues of disagreement and slow pace that were reported by participants. Wilhelm (1999) offered some techniques and strategies that teachers could implement to nurture students' communication and negotiation skills, as well as their sense of responsibility. Informing students that they will be expected to negotiate and encouraging them to communicate through written notes could help them prepare themselves for "future negotiation and consensus-building activities" (p.18).

On the other hand, the study had some limitations that must be acknowledged too. Firstly, it must be recognised that the study had a limited size of participants; it would have been convenient to have a bigger sample of participants so that the data obtained was more representative. In order to explore learners' views, their responses were solicited through a questionnaire. Although the data obtained through these means were valuable, follow-up interviews and stimulated recall would have encouraged participants to share more comprehensive responses that would have allowed us to get a deeper insight into the different aspects that were examined for this study. Furthermore, students' language results were not included in the analysis; examining this data would have allowed us to observe the impact of pair formation conditions on quality of written output. Finally, an issue that was not addressed in this study was whether patterns of interaction may be interrelated with students' expression of agency. As such, future studies could analyse the interplay between agency, patterns of interaction and pair formation method. On the whole, CW is a practice that appears to bring many possibilities for EFL learning and peer interaction to the classroom; at the same time, more research needs to be done to have a better understanding of what takes place during CW tasks so we can maximize their potential.

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# APPENDICES

## Appendix A. Questionnaire

**English version**

PART 1: BACKGROUND INFORMATION

1. How old are you?

2. Why did you sign up for this English course?

3. What numbers were you given in the first and second task?

PART 2: GENERAL VIEWS AND PAIR FORMATION METHOD

4. What did you like about writing together with a partner?

5. What did you dislike about writing together with a partner?

6. In the future, if you could choose to write individually or collaboratively, which one would you prefer and why?

7. For one of the tasks you were allowed to choose your partner, and for the other task you were assigned a specific partner. When you were allowed to choose who to write with, why did you choose to work with your partner?

8. In the future, would you prefer to choose your partner or let the teacher assign one to you? Why?

9. Do you think you wrote a better text with the partner that you chose or with the one that was assigned to you? Why?

PART 3: AGENCY AND EMOTIONS

10. In the task in which you chose your partner…

    1. How did you feel about the task before starting it, and why?
    2. How did you feel during the completion of the task, and why?
    3. How did you feel about the experience after it was done, and why?

11. In the task in which a partner was assigned to you by the teacher…

    1. How did you feel about the task before starting them, and why?
    2. How did you feel during the completion of the task, and why?

      3. How did you feel about the experience after it was done, and why?

12. In task 1, what happened if you and your partner disagreed on something? How did you act when this happened and why? And in task 2?

13. What qualities would you look for in your ideal partner to get the writing done? Why?

14. Would you say you demonstrated said qualities in task 1? And in task 2? Include examples of how you demonstrated them.

PART 4: BENEFITS FOR EFL LEARNING

15. How helpful do you think these collaborative writing tasks were for the development of your writing skills? Why?

16. How useful were these tasks for you to improve your English grammar? Why?

17. How useful were these tasks for improving your English vocabulary knowledge? Why?

**Spanish version**

PART 1: BACKGROUND INFORMATION

1. ¿Qué edad tienes?

2. ¿Por qué te has apuntado a este curso de inglés?

3. ¿Qué números te han tocado en la primera y en la segunda tarea?

PART 2: GENERAL VIEWS AND PAIR FORMATION METHOD

4. ¿Qué te ha gustado de escribir con un/a compañero/a?

5. ¿Qué no te ha gustado de escribir con un/a compañero/a?

6. En el futuro, si pudieras elegir entre escribir individualmente o en parejas, ¿cuál preferirías y por qué?

7. Para una de las tareas podías elegir a tu compañero/a, y para la otra se te asignó un compañero/a específico/a. Cuando se te permitió elegir con quién escribir, ¿por qué elegiste trabajar con esa persona en concreto?

8. En el futuro, ¿preferirías elegir a tu compañero/a o dejar que el profesor te asigne uno/a? ¿Por qué?

9. ¿Crees que escribiste un texto mejor con el/la compañero/a que elegiste o con el/la que te asignaron? ¿Por qué?

PART 3: AGENCY AND EMOTIONS

10. En la tarea donde escogiste a tu compañero/a…

   1. ¿Cómo te sentías antes de empezar la tarea y por qué?
   2. ¿Cómo te sentiste durante el writing y por qué?
   3. ¿Cómo te sentías después de la experiencia y por qué?

11. En la tarea donde la profesora te asignó un/a compañero/a…

   1. ¿Cómo te sentías antes de empezar la tarea y por qué?
   2. ¿Cómo te sentiste durante el writing y por qué?
   3. ¿Cómo te sentías después de la experiencia y por qué?

12. En la primera tarea, ¿qué ocurría si tú y tu compañero/a estabais en desacuerdo sobre algo del writing? ¿Cómo actuabas cuando eso ocurría y por qué? ¿Y en la segunda tarea?

13. ¿Qué cualidades buscarías en tu compañero/a ideal para sacar adelante el writing? ¿Por qué?

14. ¿Dirías que has demostrado estas cualidades cuando hiciste la primera tarea? ¿Y en la segunda? Incluye ejemplos de cómo las has demostrado.

PART 4: BENEFITS FOR EFL LEARNING

15. ¿En qué medida crees que te han ayudado estas tareas de collaborative writing para desarrollar tus habilidades de escritura? ¿Por qué?

16. ¿En qué medida te han resultado útiles estas tareas para mejorar tu gramática inglesa? ¿Por qué?

17. ¿En qué medida te han resultado útiles estas tareas para mejorar tus conocimientos de vocabulario en inglés? ¿Por qué?

**Appendix B. Writing tasks**

**Writing task 1**

**Subject:**

In the last months, crime has run rampant in your city. Due to these circumstances, your local government wants to take the necessary measures to make the city safer for the local people. Your college principal has asked students to write a report on the situation to send to the local government. In your report you should:

- Describe some of the problems/incidents that have occurred in the city.
- Suggest what measures the government should take to solve these problems.

Write a **report** between **140-190 words.**

**Writing task 2**

**Subject:**

In the last few months, teachers at your school have expressed concern over the excessive use of the Internet by students to access social media and online forums. Consequently, they have requested that the headteacher disconnect the Internet from the school's computers, to ensure students don't get distracted during the lessons. You and your classmates have decided to write a report to the headteacher to stop that from happening. In your report, you should:

- Explain why Internet access should be given to the students.
- Make some recommendations about how internet access might be controlled.

Write a **report** between **140-190 words.**

45