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Co-learning: The effect of group size on the effectiveness and benefits of group work

Official master's degree in English Teaching in Secondary Schools, Vocational Training and Language Centres

Master's Dissertation

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Bilingual Summary

Abstract: While there is a large body of research which supports the notion that group work facilitates language development, less research exists on the possible hampering effect that group work size might have on student learning. Thus, the present study sets to investigate whether group size as a variable may impact the effectiveness and benefits drawn from co-learning, as well as the ways in which collaborative learning (CL) fosters language learning. The article's aim is therefore to provide useful conclusions from which to base future lesson planning decisions. The data to analyse the article's research questions was obtained through videorecording six experimental groups from three different 1st of ESO classes in a state secondary school. The results indicate that group size influences the benefits and effectiveness of group work for second language acquisition.

Keywords: Collaborative learning (CL), group work, language learning, group size, qualitative research, social constructivism

Resum: Tot i haver un ampli ventall de recerca que dona suport a la noció que el treball en grup facilita l'aprenentatge de llengües, hi ha menys recerca sobre el possible efecte advers que el nombre d'integrants d'un grup de treball pot suposar per a la formació de l'alumne. Per tant, aquest estudi pretén investigar si el nombre d'alumnes que componen un grup treball pot afectar l'eficàcia i els beneficis derivats del CL, a més de com el CL fomenta l'aprenentatge de llengües. L'objectiu d'aquest article és, doncs, extreure conclusions útils a partir de les quals poder basar futures decisions pràctiques pel que fa a la planificació de lliçons. Les dades per donar resposta a les preguntes clau d'aquesta recerca varen ser obtingudes mitjançant gravacions en vídeo de sis grups focals pertanyents a tres grups de primer d'ESO d'un institut públic. Els resultats indiquen que el nombre d'estudiants que componen un grup treball influeix sobre l'eficàcia i les avantatges del treball en grup per a l'adquisició d'una segona llengua.

Paraules clau: Treball col·laboratiu, treball grupal, aprenentatge de llengües, nombre d'alumnes d'un grup treball, recerca qualitativa, socioconstruccionisme

1.0 Introduction and research questions

The last decade has seen a growing body of empirical research on Collaborative Learning (CL) as a result of the pedagogical transition from teacher-centred to student-oriented learning which has emphasised the social nature of learning and given rise to the renegotiation of the learner's agency in the educational process. However, while much research reaffirms the numerous benefits derived from group work (Alfares, 2017; Koç, 2018), the evidence available on the effect that group size has on the effectiveness of group work on linguistic grounds is both few and inconclusive. Accordingly, this paper aims to shed light on the ways in which group work fosters language learning as well as to assess whether group size determines the effectiveness of group activities. More precisely, this paper seeks to address the following research questions:

- 1) In what ways does group work foster and enhance language development?
- 2) Does group size have an impact on the benefits of group work for language learning?
- 3) How effective is group work for language learning?

In an attempt to provide useful conclusions from which to base future lesson planning decisions, the use of Conversation Analysis (CA) to answer this paper's questions is applied, based on the recordings of six focus groups belonging to three 1st of ESO classes in a state high school located in a medium to low-income neighbourhood of Sant Boi de Llobregat, Barcelona. The study is comprised of students with both mixed backgrounds and mixed language proficiencies so as for it to be conducted through heterogeneous focus group capable of mirroring the reality found in most Spanish public high schools.

This paper aims to determine the outcomes of co-learning in groups of four and five students, as well as to unveil the conditions required for optimal group learning by focusing on the concepts of cooperation, collaboration, positive interdependence, individual accountability, simultaneous interaction, equal participation and group autonomy, all of which were previously employed by Johnson & Johnson (1999) to study collaborative learning. The purpose behind such focus is to, on the

one hand, evaluate whether meeting these principles leads to language learning and, on the other hand, to establish a possible causal relationship between group size and the effectiveness of group work with regards to second language acquisition. In pursuing the former, the article intends to overcome the still prevalent conception that group work is counterproductive due to students' tendency to use their native languages (L1) (Swain & Lapkin, 2000, p.268) by providing evidence which reinforces the view that learners' L1 knowledge contributes positively towards the development of an additional language (Lightbown & Spada, 2003, p.205).

2.0 Theoretical Framework

Following the shift in focus from teacher-centred to student-centred learning that has taken place in the educational arena over the last decade, much research has reiterated the many benefits of using group activities in furthering learners' linguistic abilities in a foreign language (Koç, 2018; Alfares, 2017, Kagan, 1995). Moreover, *collaborative learning* and *cooperative learning* are among the most frequently employed terms in the discussions of the implications of group work for EFL learners, ergo, concretising their definitions in connection to group work is essential to understand how joint tasks may lead to language learning.

Collaborative and Cooperative learning are occasionally considered as synonymous across the literature in that both approaches are goal-directed and involve the individual accountability of all group members (Yesilyurt, 2010; Law, 2011). Nonetheless, many researchers including Dooly (2018) have highlighted the procedural and hierarchical differences between the two classroom techniques. With its roots in social constructivism (Vygotsky, 1978), collaborative learning is both a learning method and a personal philosophy (Panitz, 1999), and is most popularly defined as "an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task, or create a product (Laal, 2013, p.815). Comparatively, cooperative learning is commonly described as a learning approach wherein the individual completion of sub-tasks by the members of a group contributes towards the accomplishment or creation of a common goal or product (Dooly, 2018).

These sub-tasks do not necessarily require working together; they can be completed individually. It is acknowledged in this study that there are conflicting definitions about both terms. However, inspired by Bruffee (1995)'s understanding of the latter, the present paper makes a distinction between the two learning approaches and considers group work as collaborative learning on grounds that the study is conducted through experimental groups whose members have not been assigned specific roles and responsibilities.

Consistent with Johnson (1971) and Yager et al.'s (1985) finding that group work develops learners' communication and speaking skills, studies including Webb (1982) have found this to be the case as a result of learners being granted the opportunity of receiving immediate peer feedback, hence the chance of repairing any inaccurate output in the target language. Moreover, Johnson and Johnson (1990) go further to suggest that peer feedback emerges in collaborative learning as a result of students' enhanced understanding that members' individual goals are positively correlated with the group's success. In contrast to Johnson and Johnson (1990), however, Richards (2005) and Harmer (1991) found that it is precisely the relaxed and nonthreatening environment of group work which pushes learners to negotiate meaning and both grant and accept corrections from student peers. Therefore, while giving support to the Affective Filter Hypothesis which views low levels of stress as an indispensable ingredient for language acquisition (Krashen, 1982), Richards (2005) and Harmer's (1991) research has provided convincing evidence to support the notion that group work has the potential of generating the necessary motivational conditions which hone students' skills in a foreign language (Long, 1984).

Moreover, in support of Krashen's (1982) Input Hypothesis which posits that L2 acquisition is input driven, thus that meaningful and comprehensible input is important for interlanguage development to occur, Oliver (1998) found that while group work enables all students, more specifically the more advanced EFL learners, to have extended language practice opportunities (Koç, 2018) in a foreign language, the flip side of the coin is that group work enables lower-ability EFL learners to negotiate their existent knowledge on the L2 through being exposed to input that is one step beyond their current stage of linguistic competence. Therefore, the impact of group work for second language learning is not only on the quantity of student talk, but also on the quality of it. Nevertheless, while studies like Alfares

(2017) and Koç (2018) have also given support to the finding that group work facilitates language practice, albeit as a result of students' self-esteem being heightened in group assignments, researchers such as Alahdal (2019) have challenged such finding by stating that it is generally the more advanced learners who take advantage of the practice time conferred to them, while the less proficient learners feel too shy to speak up.

Additionally, while uncovering the benefits of group work for second language development, the aforementioned studies have substantiated Vygotsky's (1978) sociocultural approach to cognitive development which posits that language learning is a socially and culturally mediated process which stems from social interaction.

Nonetheless, despite the advantages of co-learning identified in the literature above, group work is not without criticism and a number of studies have pinned down a series of conditions and factors which determine the success of group work. Although apparent inconsistencies with regards to the effect of group size on the effectiveness of group work emerge across the literature on collaborative learning, such research has put the focus on group size as a potential moderator of group work. Indeed, while studies, including Fareh (2010), have found that "only with groups of up to four there is any remarkable percentile gain" and that "as the group size moves to five and more, the gain is in negative (Fareh, 2010, as cited in Alahdal, 2019, p.3), other studies have suggested that both groups of four and five students tend to be the most successful (Davis, 1993). Additionally, studies which have reckoned groups of three or four learners to work best have attributed the former to the fact that as the group increases in size less members tend to participate and contribute to the group (Csernica et al., 2002). This is also reflected by Jacobs and Loh (2003) who argue that larger groups make individual accountability and equal participation more challenging as a result of group members being more likely to avoid responsibility.

Additionally, the learning outcomes of group work have been found to be influenced on affective grounds. In other words, while it has been uncovered that group work which is facilitated in an autocratic manner by dominating or lead members leaves little space for interaction relating to the task or project to be carried out (René et al., n.d.), it has also been found that specifying group members'

roles and responsibilities may yield greater learning results. Moreover, contributing to the premise that personality affects the willingness of students to enter into negotiation and collaboration with comembers (Forrester et al., 2010); Alfares (2017) discovered that shy and anxious students may be affected negatively when asked to interact, and that as a side-effect, this might also impact negatively on their fellow peers.

Furthermore, the effectiveness of group work has been argued from a cultural standpoint after social studies having revealed that cross-cultural differences among learners may have an impact on their degree of collaboration. To be precise, the general finding has been that while Western Europeans and North Americans embrace critiquing and questioning others' opinions during joint tasks, collectivist cultures including the Asian and some African cultures regard the Western approach of collaborative learning as culturally inappropriate (Cox, Lobel & McLeod, 1991).

However, despite the benefits and possible hindering factors for group work ascertained in the literature, Alahdal (2019) situated the effectiveness percentage of group work as an EFL teaching and learning strategy at 72.5%. Moreover, due to the potential subjectivity in the analysis of the effectiveness of collaborative learning, (and inspired by Johnson and Johnson, 1999) categories for successful co-learning, Jacobs, Power and Loh (2002) identified the principles of *cooperation as value*, *positive interdependence, individual accountability, simultaneous interaction, equal participation, collaborative skills* and *group autonomy* as necessary conditions for fruitful group work (refer to table 1.0 in section 3.3 for an explanation of each). These categories will be employed in subsequent sections of this dissertation to provide the study with a conceptual window through which to answer the paper's research questions and determine whether language learning through group tasks should be realised in smaller groups for the benefit of the EFL learner.

3.0 Methodology

To determine whether there is a tangible connection between group size and language development in co-learning, a qualitative micro-analysis of the lexis and paralinguistic features

employed by twelve-year-old students during a group task was undertaken in order to somewhat mirror Skuse's (2012) study on collaborative learning. With its primary focus on the processes involving group work in favour of second language acquisition, the present study consists of both interactional and conversation data so as to elucidate the conditions generated during collaborative learning which promote language acquisition.

3.1 Contextualisation and data collection

The data to answer the paper's research questions were collected at a public high school located in a low-to-medium income neighbourhood of Sant Boi de Llobregat. Due to the current COVID-19 restrictions, the Catalan secondary state school offers six lines at 1st of ESO (year 7), six lines at 2nd of ESO (year 8), five lines at 3rd of ESO (year 9), four lines at 4th of ESO (year 10) and two lines at sixth form (Batxillerat). The educational centre is located on the eastern metropolitan area of Barcelona with a majority of its students coming from a middle to lower social class background.

The data were obtained by video-recording two focus groups from three separate 1st of ESO classes, consisting of a total of four and five students respectively¹. All students have a basic command of the English language (level A1 to A2 according to the Common European Framework of Reference). Video-recording two focus groups from three 1st of ESO classes ensured that any observations recovered from group work were comparable against that of other focus' groups, hence, any patterns found in the data are reliable and applicable to other collaborative socio-educational contexts. All video-recordings took place during the fifth session of a teaching unit on sustainable clothes shopping practices and the negative effects of fast fashion. More specifically, all groups of four and five students were video-recorded while co-constructing a list of realistic, ethical clothes shopping rules after having been introduced to the consequences of fast fashion for both the environment and human rights during the teaching unit, which aimed to encourage students to rethink their shopping habits in order to become

¹ See Appendix 14 to access the link to the video-recordings. Please contact the researcher to be granted access to the video-recordings.

better global citizens. To mitigate the effect that background noise might have on the legibility of the data and to ensure its validity for the purpose of this study, all focus groups were video-recorded using a camera in an empty, spare classroom.

3.2 Data management

All video-recordings were viewed twice and transcribed using the Jeffersonian transcription conventions (Jefferson, 2004)². Following that, all language-relevant episodes were initially classified in consonance with Jacobs, Power and Loh's (2002) principles for effective CL (explained below in table 1.0) so as to serve as valid framework through which to examine the paper's research questions. Furthermore, to lay the foundations for a comparative analysis between the learning opportunities and benefits generated in favour of language learning in groups of four and five students, the classified data was further divided and placed into either category GX-4 (groups of four students) or category GX-5 (groups of 5 students).

Table 1.0 Identifying Jacobs, Power & Loh's (2002) categories for effective CL

Principle number	Category	Explanation/Identification
1	Cooperation as value	Participants bear the cooperative skills expected and required for group work.
2	Positive interdependence	Participants' individual output contribute towards the achievement of a common goal.
3	Individual accountability	Each group member has and plays a part in the assignment.
4	Simultaneous interaction	All participants collaborate and interact with each other.
5	Equal participation	All participants participate equally.
6	Collaborative skills	Participants display collaboration with other group members.
7	Group autonomy	The group is able to carry out the task and support each other's learning without the teacher's guidance or intervention.

.

² See Appendix 13 for transcription symbols.

3.3 Data analysis procedure

First, the transcribed data were classified (as stated, according to Jacobs, Power & Loh's, 2002 principles for effective CL) as a first blue print of the findings which might emerge in the data. Upon a more in-depth analysis of the data, it was found that the former categories needed to be broken down further into subcategories, as illustrated in figure 1.0 below. Thus, on account of some unexpected findings, the methodological decision was made to use both Jacobs, Power and Loh's (2002) categories, as well as the aforementioned newfound categories with the expectation that the latter would make the analysis more manageable and serve to better explain the features determining the effectiveness of group work within the context of second language development. Additionally, to ensure the accuracy in the analysis of the data, not only were conclusions drawn from the video-recordings' corresponding transcriptions, but also from the list of clothes shopping rules elaborated by the students as the groups' final product.

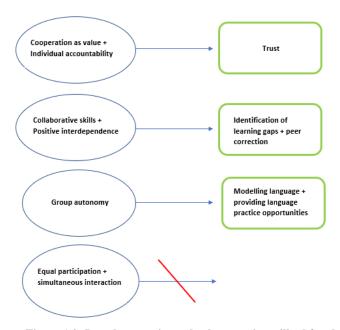


Figure 1.0- Broad categories and subcategories utilised for the data analysis

3.4 Ethical procedures

To preserve the anonymity of the participants included in the study, all names were modified and students' faces in the video-recordings blurred so they remained unidentifiable. Furthermore, in order to conduct the action-based research inside the school premises, written consent was obtained

from the school. In this school video-recording of underaged participants was permitted so long as students' and teachers' identities remained anonymous and unrecognisable.

4.0 Results and Analysis

In order to determine the ways in which group work enhances language development and whether group size as the independent variable investigated in this study influences the learning outcomes stemming from group work, conversation analysis is applied to the data. Subsequently, to investigate the effectiveness of group work as a learning model and approach to second language learning, the presence and absence of Jacobs, Power and Loh's (2002) principles for effective collaborative learning (detailed in table 1.0 in the methodology section) are examined in a total of six communicative exchanges.

4.1 Category GX-4- Groups of four

4.1.1 Cooperation as value and Individual accountability: Trust

The conversation and interactional data of all groups composed of four students revealed that collaborative learning creates the intimate learning space required for language practice and development to be fostered. Indeed, while the more advanced learners (depicted in light blue in excerpt 1) were required or encouraged, either by the situation or by their group members, to produce in the L2 (illustrated below in Excerpt 1), lower-performance learners exposed to language beyond their *Zone of Proximal Development* (ZPD), in other words, to language slightly above their current linguistic level, were also prompted to inquire on any newly-heard words, hence granted the opportunity of incorporating new language items into their linguistic repertoires (see turn 12 in Excerpt 1).

Excerpt 1: EFL students encouraged to produce in the L2

Group G1 -4 (4 students):

- 9. J: check out the (.) size (1)
- 10. S: no en plan no romper el ticket osea (.)

no like not to tear the ticket

- 11. D: xxx
- 12. N: qué es eso↑

what does that mean

- 13. S: xxx
- 14. D: ((Darío looks at José sitting beside him for help))
- 15. J: S (1) E (1) Z (1) E (.)

Group G2-4 (4 students):

13. W: IF THE ((while pointing to the mistake on the sheet of paper))
((Marc and Inés giggling in the background)) xxx so if (1) the (1) centre (3)
if you are a girl (1.5) if you are a girl ((Javier starts writing)) (1) you need to go to
the: e: (.) girls' section if you are a xxx ((Seeing that Javier is struggling to write
Waseem takes the paper to write)) escribo yo es que no te enteras

Group G3-4 (4) students):

- 52. G: na na na na (.) tú tú sabes (.) tú escribes (2) please

 No no no no you know more you write it
- 53. D: ((Damian starts writing on the sheet of paper))

However, as depicted in excerpt 1 above, while a predisposition to assist group peers by the higher-performing students, be it by providing the spelling of words or by taking over when necessary, is apparent in groups G1-4 and G3-4, the opposite is momentarily found in group G2-4 when a lower-performance student struggles to produce the written output dictated by the more advanced learner. In fact, besides stripping him of his role as writer after assuming his role (turn 13. W: ((Waseem takes the paper to write))), the lower-performance student is moreover discredited in his role through the remark " $n \ g \ v \ " \ o \ g \ " \ y \ t \ k \ v \ g \ " \ f \ q \ w \ \phi \ t \ ig (Néperthele'ss,i this visy thie pole 'instance' in the kdatau \ c \ k \ f$ corresponding to groups of four where an unsupportive attitude is observed. What is more, eight turns later, the lower-performance student redeems his role as writer; (turn 21. J: ((Waseem points at Javier as he's got the paper and pen now))).

4.2 Collaborative skills and Positive interdependence

4.2.1 Peer correction and identification of learning gaps

As revealed by turns 28-35 (excerpt 2 below), group assignments enable students to receive immediate feedback and peer correction by group members who uphold and demonstrate an equitable status quo and valence³ in the group. Indeed, as shown in turn 34, the more advanced learner (depicted in light blue) peer corrects a less advanced learner's written output, which as depicted in image 1.0 testifies to the notion that group learning helps to develop students' accuracy in the target language (Gass, 1997; Long, 1996).

Excerpt 2: Peer correction leading to accurate output in the target language

```
28. D: vale (.) clothes that you: (1)
            okay
```

29. S: [xxx

30. J: don't buy] (.)

31. D: ((Darío writes on the paper while José closely supervises him))

32. S: **comprar es** shopping $\mathbf{no} \uparrow (1)$ to buy is right

33. D: ono (1)

34. J: **<u>no</u>** buying **<u>no</u>** (.) bu:yɪŋ (2.5)

no

((Darío corrects the spelling on the paper)) vale nos queda la última (.) va 35. D:

q m c { " y g ø x g " i q v " q p g " n g h v " " "

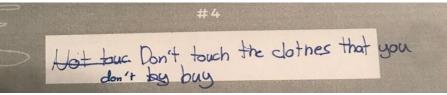


Image 1.0- an example of spelling correction through peer correction

Moreover, apart from laying the grounds for immediate peer support as shown in turns 28-30, wherein José finishes the sentence that Darío has started but unsuccessfully managed to continue in turn 28, group work furthermore enables language learners to fill in any learning gaps through the use of clarifications, advancing their language to higher proficiency levels;

³ Valence here refers to the power upheld by participants within a single conversation exchange.

(Turn 32: S: comprar es shopping $no\uparrow(1)$).

to buy is right

In line with the result that group work facilitates personalised peer feedback and corrections as depicted in turns 23 and 24 pertaining to the transcribed data from group G1-4, peer correction is not always unidirectional and may also be offered from the intermediate level learner to the more advanced learner (indicated in light blue) as in the following example:

23. W: una cosa (.) cómo se dice [ropa†

One thing how do we say clothes

24. I: garments] **sí** (1)

yes

In addition, contrarily to the finding that peer correction takes place as a result of explicit error mentioning, the data from group G2-4 reveals that such is not always the case and peer correction may also be rendered indirectly through non-linguistic information such as repetition of a dubious word, followed by giggles, as seen in turns 13 and 14;

13: W: [...] If (.) the (.) the shopping centre have (1) **probators** (2)

changing rooms

14. M: **probators** ((giggling)) (3)) *changing rooms*

Evidence of uptake of the correction for the interlanguage error is not seen immediately in the transcribed data, it does however correctly appear in the task's final written product as 'e j c p i k p i " t q q o (see image 1.1 in appendix 9). Indeed, in addition to furthering learners' language abilities through peer correction, the interlanguage correction evidences the fact that group work also develops learners' linguistic competences in a foreign language through stimulating independent self-correction, as exemplified in the video-recorded data of group G2-4 around minute '01:28 when Waseem immediately changes "probators" for *changing rooms*.

4.3 Equal participation and simultaneous interaction

While all EFL students in groups G1-4 and G2-4 made at least a written and or verbal contribution, whether in the L1 or in the L2, which supported and reinforced their own language development or that of other team members, this same finding was not identified in group G3-4. In fact, despite Gabriella's efforts to accommodate Alejandro into the group; (turn 12. G: good Alejandro↑ ((while doing a thumbs up))), and scaffold language by tying the task's objective of elaborating a list of ethical clothes shopping rules to a familiar and relatable prop which might inspire this student to think back on the manufacturing processes of fast fashion, hence encourage language production;

67. G: ((to Alejandro) piensa en la sudadera que llevas (1) o en la mía))

Alejandro still does not utter a single word in English (L2) or in his mother tongue (Spanish or Catalan) throughout the entire duration of the task. Nonetheless, while the data initially points to Alejandro's unwillingness to collaborate with his peer students, turn 69 suggests otherwise: ((looks at Alejandro and Alejandro nods in negation back to Gabriella so as to suggest that he is not confident enough to speak or has nothing to say))). These data indicate that the effectiveness of group work for second language development may also very well depend on individual factors including students' personality traits such as shyness.

4.4 Group autonomy

4.4.1 Modelling language and proving language practice opportunities

The transcribed data unveils that despite not all team members producing output in the L2, all GX- 4 groups counted on a team 'expert' who code-switched from the L1 to the L2 to model correct language use, providing lower-level students with access to language in use beyond their current proficiency level. Examples of the former language-learning approach include speaking turns 17-21 in

the video-recorded data of group G1-4 (see appendix 1), speaking turns 2-5 in the data of group G2-4 (see appendix 2) and turns 4-10 in the data corresponding to group G3-4 (see appendix 3).

Notwithstanding the result that language modelling is mostly furnished by the more advanced learners in the group, the implication is that the more proficient learners of English are endowed with a window of opportunity for self-initiated extensive language practice in the classroom which serves to further their linguistic skills through the negotiation of existent knowledge, such as exemplified through the false start in turn 19 from group G3-4, as part of the turn unit which starts in turn 16 and ends in turn 23 (see appendix 3).

5.0 Category GX-5- Groups of five

5.1 Cooperation as value and Individual accountability: Trust

Incongruous with the finding that group work generates the supportive space for language development to be incited, the data available on groups of five students, relative to the latter finding, was inconsistent. Indeed, the data concerning group G3-5 suggests that a safe learning environment was generated as corroborated by a lower-ability learners' choice to contribute despite having to follow through with his contribution in Spanish towards the end of turn 2; (G3-5 Line 2. J: yes yes (2) okay e:: WHAT (1) regla ((giggling)) (1)). The data from group G2-5 indicate that contrary to giving support and stimulating ideas, working in groups of five may lead to the imposition of roles and responsibilities by other group members. Moreover, as evidenced in the data below and in appendix 5, such imposition seems to result in the impediment of any form of self-initiated language practice and development:

- 8. W: ((placing the paper in front of Iván)) xxx pues haces la primera xxx (.)
 - then you do the first one
- 9. I: xxx ((Iván now places the paper in front of Vicente)) (1)
- 10. W: xxx ((Wailani slides the paper across the table and places the paper in front of Iván again))

Moreover, apart from turns 8-10 manifesting students' unwillingness to take on a role in the collaborative task (they hand over the responsibility to each other), this furthermore translates into the absence of both any kind of written and or verbal output in the L2 despite students having dedicated a total of 04:36 minutes on the task up until the recording was stopped (see appendix 5 and image 1.2 in appendix 10). Contrary to the evidence found in the transcribed data of groups of four students, surprisingly, the conversational data pertaining to groups G2-5 and G3-5 revealed a tendency for students in groups of more than five pupils to momentarily deviate their attention away from the collaborative task:

G2-5- 23. J:
$$xxx$$
] (1.5) que no sé (.) nos estamos desviando [xxx

$$K"fqp \phi v"mpqy""""""yg \phi tg"ftkhvkpi"qhh$$

G3-5- 22. J: podem fer també que∷ la tercera regla sigui∷↑ (1.5)

we could also make the third rule be

23. B: anem per la quatre (1)

5.2 Collaborative skills and Positive interdependence

5.2.1 Peer correction and identification of learning gaps

Analogous with the finding that co-learning in groups of four creates opportunities for peer correction and language support, all of the data corresponding to groups of five students, with the exception of group G2-5, exhibited instances of peer correction by the advanced or intermediate learners to the lower-level learners. Nevertheless, it should be noted that the transcribed data revealed significant cross-group differences within the GX-5 category regarding both the abundance and the variety of peer linguistic support strategies provided in groups G1-5 and G3-5 specifically. This finding suggests that EFL learners in larger groups do not always fully exploit all possible language support strategies and techniques to overcome potential language barriers. In effect, as exemplified in tables 2.0 and 3.0 in appendix 11 and 12, while group G1-5 resorted to a wider selection of language learning techniques

including *question formulation, clarifications* and *spelling peer correction* to further their language abilities in the L2, group G3-5 solely resorted to the *other-initiated other repair*⁴ language- learning strategy and only did so in one occasion, in turn three (see appendix 4).

5.3 Group autonomy

5.3.1 Model utterances and providing extended L2 practice opportunities

Whilst the data pertaining to groups G1-5 and G3-5 displayed instances of language modelling provided by the advanced learner to the intermediate and lower-level learners (see excerpt 3 below), the data from group G2-5 shows no proof of such language-learning technique being employed on account of no L2 being produced. Consequently, the former result points to the idea that group size may have an effect on students' productivity levels within the context of second language learning.

Excerpt 3: Examples of language modelling by the advanced learners

G1-5: 12: A: e:: (1) check (2) osea revisar cuanta roba tienes y: y el dinero que vas a pagar

 $K"ogcp"ejgem"jqy"owej"enqvjgu"{qw"jhave to pay}$

13. T: (2) e:: (1) < check (.) how much clothes (1) they have>

G3-5: 15. **B**: **de dónde es** [xxx

where it comes from

16. A: we can check where is the brand↑

5.4 Equal participation and simultaneous interaction

Furthermore, it is important to highlight that matching group G3-4, the transcribed data of group G2-5 also revealed no oral or written input on the part of a shy student. However, unlike the indications found in the data of group G3-4, and despite the shy student, Saima, being acknowledged by Wailani

⁴ In contrast to the self-initiated repair, this type of repair is initiated by the addressee or recipient in the conversation.

and interacting with the latter student through gestures, the shy student from group G2-5 did not receive the necessary affective support and verbal encouragement from peer students to verbally contribute towards the task. Nonetheless, the fact that two students from two distinct groups did not produce any output, whether in the L1 (Catalan or Spanish) or in the L2 (English), implies that the language learning opportunities generated by group work as a learning format are best profited by those students whose personal traits do not conflict with the social nature and interactional requirements of group work.

6.0 Measuring the effectiveness of group work as a languagelearning model

6.1 The effectiveness of group work in groups of four

As mentioned in section 4.13, the data revealed that all groups in category GX-4 counted on an advanced learner in the group. This individual assumed the role of L2 'facilitator' whenever the communicative situation required it. Parallelly, however, the intermediate and lower-level learners took up other roles including that of writers (as portrayed in excerpt 1 in section 4.1.2), which points to the learners' mutual support in adopting roles, whether knowingly or unconsciously, which align with their individual strengths and which contribute towards the achievement of a common goal. Nonetheless, the fact that a shy student in group G3-5 did not manage to produce any output, whether in the L1 or in the L2, such as noted in section 4.3 above, makes it difficult to determine whether that particular student meets the *cooperation as value* principle for effective collaborative learning as outlined by Jacobs, Power and Loh (2002). Ergo, unable to assess the former, the study establishes that while all participants in groups G1-4 and G2-4 meet the *cooperation as value* principle through offering at least a contribution on their part, group G3-4 does not, as participants do not unanimously exhibit this value.

On the other hand, all students in groups GX-4, except group G3-4, had a role in the group task which served to advance them in their achievement of the shared end goal; a list of sustainable clothes shopping rules. Indeed, as summarised in table 4.0 (see appendix 7), while all EFL learners in groups G1-4 and G2-4 both had and executed their roles, hence complying with Jacobs, Power and Loh's

(2002) *individual accountability* principle for effective co-learning, the same student from group G3-4 who failed to comply with the *cooperation as value* principle, too, in this case, did not satisfy the *individual accountability* principle as a result of not managing to execute his role. Consequently, in light of the fact that not all team members from group G3-4 fulfilled the aforementioned principle, it is assumed that solely groups G1-4 and G2-4 adhered to the *individual accountability* principle in its entirety.

Likewise, as depicted in section 4.4 "Equal participation", and further substantiated by the finding that all group members in groups of four, with the exception of group G3-4, contributed to the group assignment by producing oral or written input in at least one occasion (see appendix 1, 2 and 3), it is plausible to assert that only groups G1-4 and G2-4 complied with the *positive interdependence* principle which maintains that participants' individual input is necessary for the successful attainment of a common objective. Furthermore, on account of the former finding, the study also found that Jacobs, Power and Loh's (2002) *collaborative skills* principle which holds that participants should display collaboration with other group members, was only fully achieved by all group constituents of groups G1-4 and G2-4.

Nevertheless, although the above analysis in section 5 points to a significant effectiveness in group work as a language-learning format, its effectiveness in groups of four students is somewhat reduced and questioned under Jacobs, Power and Loh's *equal participation* principle⁵ for effective CL. In fact, while the number of speaking turns in group G1-4 is balanced between Darío, José and Said, Nassima displays a significantly inferior number of turns in comparison to other group members, taking part only in 4 turns. Correspondingly, the transcription of group G2-4 displays a similar finding to the one just described, with Javier having a markedly inferior number of turns with respect to his team members; 2 turns. Analogous with such finding is the data on group G3-4 which manifests an even greater turn-taking imbalance among students by reason of Alejandro providing no input at all despite being encouraged to by another student (illustrated in turns 67-69 in section 4.3). Thereupon, the

.

⁵ Refer to table 1.0 in the Methodology section for a description.

analysis indicated that the effectiveness of co-learning in groups of four was compromised on the basis of unequal learner participation.

Moreover, as indicated by the transcribed data of all GX-4 groups, all students interacted with another group member, whether verbally or through non-verbal communication⁶, at least once during the course of the task. As a result, the data corroborates the effectiveness of group work in the context of second language development on grounds of *simultaneous interaction* which, on the one hand encourages language production, and on the other hand, maximises student exposure to the target language. In addition, due to all GX-4 groups containing an advanced learner who modelled language use in the L2, all groups of four were able to work autonomously towards the achievement of the joint outcome, complying as such with the principle of *group autonomy*⁷ by Jacobs, Power and Loh (2002).

6.1.1 A synthesis of the effectiveness of groups of four against Jacobs, Power & L o h ' sategor2es0f@reffective CL

Finally, a synthesis of the above analysis indicates that the *cooperation as value* principle by Jacobs, Power and Loh (2002), which asserts that all participants should display collaborative skills, is met by all GX-4 groups with the exception of group G3-4. It is proposed that this is a result of Alejandro, as a shy student, not contributing any verbal output in attainment of the joint task. Similarly, the *individual accountability* principle, which claims that all participants must have and play a role in the task, is met by all GX-4 groups except for group G3-4 due to Alejandro not performing his role as 'idea provider'. Likewise, as a result of the former student from group G3-4 not offering individual output, the results show that only groups G1-4 and G2-4 meet the *positive interdependence* principle which states that all group members should provide output which contributes to the task's end product. Additionally, the same finding was revealed with respect to the *collaborative skills* principle as Alejandro from group G3-4 did not collaborate through output production. However, none of the groups met the *equal*

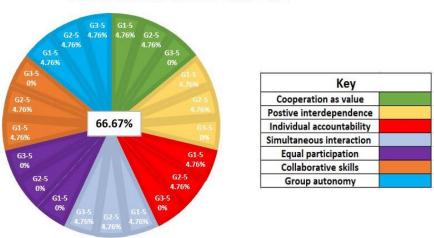
⁶ Example: Turn 69: ((looks at Alejandro and Alejandro nods in negation back to Gabriella so as to suggest that he is not confident enough to speak or that he has nothing to say)).

⁷ Refer to table 1.0 in the Methodology section for a description.

participation principle due to the conversational data (refer to appendix 1, 2 and 3) displaying a major turn-taking imbalance among participants. Conversely, all GX-4 groups satisfied the *simultaneous* interaction principle as all group members interacted with each other whether verbally, through gestures, or using a combination of both. Furthermore, the same finding is shown regarding the *group* autonomy principle as, like the category name itself exemplifies, all GX-4 groups were able to work autonomously due to all groups containing an advanced learner that guided learners' interactions.

6.1.2 The effectiveness of group work in groups of four in quantitative terms

Consequently, based on the previous qualitative analysis depicting the effectiveness of group work on the basis of the fulfilment and nonfulfillment of Jacobs, Power and Loh's (2002) categories for effective CL by all student members in groups GX-4, the effectiveness of group work in groups of four translates into the following effectiveness percentage; 66.7% (depicted in figure 2.0).



THE EFFECTIVENESS OF GW IN GROUPS OF 4

Figure 2.0 The effectiveness of group work in groups of 4

6.2 The effectiveness of group work in groups of five

All group members in group G1-5 without exception demonstrated an awareness of the collaborative expectations of group work, hence complied with the *cooperation as value* principle for effective CL by Jacobs, Power and Loh (2002). Contrastingly, however, as depicted in section 5.1.2 and in the data of group G2-5, such group did not comply with this value due to the fact that nobody in

the team showed the willingness to take on the role of writer (see turns 8 and 9 in appendix 5), an imperative role given that the aim of the group assignment was to produce a written product. Similarly, Jia Li in group G3-5 did not make an oral or written contribution to the task (see appendix 6), hence indicating that the *cooperation as value* principle for effective CL was only ever completely met and accomplished by group G1-5.

On the other hand, a similar result was found across the data of groups of five with regards to the fulfilment of the *individual accountability* principle by Jacobs, Power and Loh (2002) which stipulates that all team member must have and play a part in the accomplishment of the final group product. Indeed, whilst as depicted in turns 4-27 (see appendix 4), all EFL learners from group G1-5 played a part in the elaboration of the written product, some students in groups G2-5 and G3-5 not only did not execute their roles, such as conveyed in the following turn; 27. I: ((Iván puffs and blows to convey slight disconformity towards the role that has been assigned to him)), but some students including Jia Li and Saima did not even make the effort to take one up by themselves. Therefore, the data conveyed that solely group G1-5 fulfilled the *individual accountability* principle for effective collaborative learning.

Furthermore, as portrayed in the data pertaining to groups G2-5 and G3-5, a student in each of the groups respectively did not offer any verbal or written contribution during the group discussion, therefore suggesting that the aforementioned groups of five did not fully comply with Jacobs, Power and Loh's (2002) *positive interdependence* principle for successful CL. In stark contrast to the latter result, however, stands the data of group G1-5 which opposite to groups G2-5 and G3-5 revealed that all learners adopted the roles of *writer* and *idea provider* interchangeably (see appendix 4). Accordingly, it is asserted that group G1-5 successfully executed the *positive interdependence* principle required for effective group work due to all EFL learners providing input which contributed towards the end product. Furthermore, the finding that all learners in groups of five, excepting those in groups G2-5 and G3-5, offered input in the L1 and or in the L2, implies that the *collaborative skills* principle by Jacobs, Power and Loh (2002) was satisfied exclusively by group G1-5.

Correspondent with the finding in section 5.4 which revealed that group work in groups of four was ineffective by reason of an unequal participation among group peers, this same result was found in the case of groups of five students as illustrated in table 5.0 in appendix 8. In view of such discovery, it is thus established that Jacobs, Power and Loh's (2002) *equal participation* principle was unfulfilled by all groups of five.

On the contrary, however, while the effectivity of group work was seriously challenged and doubted on grounds of the *equal participation* principle for effective co-learning, its effectiveness was arguably supported on account of the *simultaneous interaction* principle by Jacobs, Power and Loh (2002) which entails that all participants must interact with each other in order for group work to be deemed effective. Indeed, as suggested in the data of groups G1-5 and G2-5, all EFL learners produced output to interact with other group members, except Saima in group G2-5. However, this student also interacted with other group members at least once during the task, yet through non-verbal language as depicted in turn 2 (see appendix 5). Nevertheless, such result was not apparent in the case of group G3-5 as Jia Li does not offer any kind of contribution to her peer students. Consequently, in light of the former, it is reasoned that only groups G1-5 and G2-5 satisfied the principle of *simultaneous interaction*.

Additionally, due to all GX-5 groups displaying an advanced learner who filled in any of the other students' learning gaps in the L2 (refer to section 5.2.1 for examples), therefore enabling the group to progress without the teacher's intervention, the present study acknowledges that the *group autonomy* principle was met by all groups of five students.

6.2.1 A synthesis of the effectiveness of groups of five against Jacobs,

Power & Loh's (2002) categories for

Lastly, a summary of the aforementioned findings reveals that the *cooperation as value* principle for effective CL by Jacobs, Power & Loh (2002), was only met by group G1-5 as a result of all members contributing, hence demonstrating an awareness of the expectations of group work. Moreover, with regards to the *individual accountability* principle which outlines that all group members

must have and play a role in the collaborative task, solely group G1-5 complied with the former principle as at least a learner from groups G2-5 and G3-5 respectively, failed to execute his or her role in the group. Similarly, the *positive interdependence* principle which considers that all participants ought to provide individual output that contributes towards the accomplishment of the end goal or product, was only complied with by group G1-5 as a result of groups G2-5 and G3-5 exhibiting a learner that did not offer any verbal or written output. Furthermore, on account of the latter, the data also revealed that the *collaborative skills* principle was, too, solely accomplished by group G1-5. On the other hand, analogous with the finding from category GX-4, all groups of five students did not satisfy the *equal participation* principle as supported by the unequal distribution of turns in all of the groups. Likewise, in consonance with the results from category GX-4, the data found that all learners in groups of five interacted with each other orally or through gestures, thus, satisfying the requirements of the *simultaneous interaction* principle for effective CL. Finally, the study establishes that all groups met the *group autonomy* principle due to all groups of five containing an advanced learner capable of filling in other learners' learning gaps in the target language.

6.2.2 The effectiveness of group work in groups of five in quantitative terms

Therefore, on account of the previous qualitative analysis denoting the effectiveness of group work based on the fulfilment and unfulfillment of Jacobs, Power & Loh's (2002) principles for effective collaborative learning by all learners in category GX-5, the effectiveness of group work in groups of five corresponds to a 42.86% (see figure 3.0 below). In consequence, besides representing a negative gain in the effectiveness of group work in groups of five, it moreover highlights a considerable inferiority with respect to group work in fours by establishing group work in fours as superior by a 23.81% margin difference.

THE EFFECTIVENESS OF GW IN GROUPS OF 5

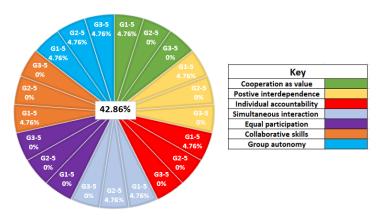


Figure 3.0 The effectiveness of group work in groups of 5

7.0 Discussion

The present study has found that group work in groups of four learners confers the necessary motivational and affective support which facilitates second language acquisition and, in the majority of cases, promotes language practice. Nonetheless, the study found that in groups of more than four students, the supportive learning conditions required for second language practice to take place are not always created, as exemplified in the transcribed data of group G2-5 in appendix 5. Additionally, as exemplified in excerpt 1, while the study has unveiled that group work in smaller groups encourages most learners to produce oral and written output in the L2 as a result of the interplay between the interactional requirements of such a learning model and the pedagogical support demanded from the lower-ability learners to the more advanced learners, the transcribed data of group G2-5 evidenced that this is not always the case in groups of more than four students. Indeed, while the former result found in the data of groups of four gives support to Oliver (1998) and Koç's (2018) finding that group work enables learners to have extended language practice opportunities in the foreign language, such result moreover stands in support of Vygotsky's (1978) social constructivist theory of learning which places social interaction at the heart of the learning process.

The paper has shown that group work in groups of four fosters language learning through enabling learners to receive personalised feedback or corrective feedback explicitly; through error mentioning such as portrayed in excerpt 2, or indirectly; through prosodic signals such as giggles (turns 13 and 14 in group G2-4). In any case, however, peer assistance is individualised according to the

learners' linguistic needs and leads EFL learners to produce more accurate output in the L2, such as corroborated by image 1.0 in section 4.1.2. This finding is consistent with Webb (1982) whose research found that granting students the opportunity of receiving individualised peer correction gives rise to greater accuracy levels of output in a foreign language. Moreover, the finding that group work in smaller groups enables learners' learning to be supported through peer feedback and assistance is possibly explained through the understanding that group work empowers learners to negotiate meaning and to afford learners the necessary linguistic support to further their linguistic competence (Richards, 2005; Harmer, 1991). However, while the former study's finding in groups of four suggests that peer assistance takes a top-down approach, the data of category GX-4 has revealed otherwise and has instead shown that peer *scaffolding*, as a kind of assistance which "assists learners in moving toward new skills, concepts, or levels of understanding" (Gibbons, 2015, p.16), can be achieved by an intermediate learner to a more advanced learner.

Contrastingly, the data of group G2-5 evidenced that peer assistance through peer corrective feedback does not always arise in larger groups. In fact, the study arguably attributed the former to the finding that a large number of ESL learners per group may have a negative impact on the dynamics of group work (see appendix 5), which may not only lead to the imposition of roles upon students, thus impeding output production in the L2, but also to decreased levels of productivity. In line with such finding, the study found that in the majority of groups of five students, at least one student deviated their attention away from the joint task during the elaboration of the final product, such as depicted in turns 22 and 23 of group G3-5 and turn 23 of group G2-5. This could be explained through the idea that as group size increases, individual accountability and learners' willingness to contribute decreases (Csernica et al., 2000; Jacobs and Loh, 2003). Consequently, the implication is that while group work in smaller groups facilitates a democratic and non-discriminatory approach to language learning which "enables students to receive the social support they need during learning" (Woolfolk, 1998 as cited in Koç, 2018), regardless on their proficiency in the target language, EFL learning in groups of five students does not always enable such approach to second language acquisition (SLA).

Similarly, the study unveiled that group work, especially in groups of four, enables learners to deploy an array of discursive 'tactics' including clarification checks and explicit question formulations which aid the learner in both refining and improving the comprehensibility of the input provided by fellow peers, as well as to fill in any learning gaps in the L2. Accordingly, this finding implies that group work may too serve as an indirect form of *assessment of learning*, defined as students' "assessment of their own learning processes" (Hargreaves, 2005, p.217), which enables learners to detect any learning gaps in the L2 through interaction with other group participants.

Moreover, the study found that heterogenous group work which counts on a combination of advanced, intermediate and low-level learners enables the latter learners in particular to have access to models of language and to be guided in their learning of a new language within the zone of proximal development by engaging in meaning-construction with other group peers. Indeed, this could partly be explained through the conception that co-learning enhances learners' confidence, hence incites the realisation of output. Furthermore, this finding stands in stark contrast to Alahdal (2019)'s study which concluded that it is primarily the advanced EFL learners who fully exploit the practice time conceded to them through collaborative tasks or activities. The implication of the previous finding is thus that group work generates the necessary instrumental motivation (Gardener, 1985 as cited in Dörnyei, 1994, p.274)8 to inspire L2 production in a second language (Long, 1984). However, as implied by the results retrieved from groups G3-5, G2-5 and G3-4, the relationship between group work and motivation is not always fixed and while some students are encouraged to produce output during the collaborative task, Jia Li and two shy students from groups G2-5 and G3-4 respectively are not and as a result do not contribute to the group neither in Spanish nor in the L2. Indubitably, the finding that Jia Li does not participate may potentially be explained through the finding that Asian people reject the idea of contradicting others' opinions during group work (Cox, Lobel & McLeod's, 1991). Likewise, the study's finding that personality attributes such as shyness influence EFL learners' degree of collaboration ties in with Dörnyei (1994)'s view that "L2 learning is more complex than simply

⁸ Instrumental motivation is a type of motivation associated with "a positive disposition toward the L2 [...] and the desire to interact" (Gardener, 1985 as cited in Dörnyei, 1994, p.274)

mastering new information and knowledge [...], it involves various personality traits and social components" (Dörnyei, 1994, p.274). In other words, the present study suggests that the overall success in second language learning through group work may be compromised by extralinguistic variables such as learner culture and personality.

Additionally, the study revealed that orally code-switching between the L1 and the L2 does not impede language learning, in fact, it is found in all groups of four students and in groups G1-5 and G3-5 corresponding to category GX-5, that it is precisely through the employment of such communication strategy that intermediate and lower-ability learners are able to access new input provided by the more proficient learners of English. Likewise, as exemplified in Excerpt 2 in section 4.1.2, the study uncovered that having to, in most cases, account for the lower-level learners' lack of ability or precision in using higher-level language items engaged learners in metatalk which simultaneously enabled the more proficient learners to consolidate their knowledge in the L2, while enabling the lower-proficiency learners to renegotiate their current knowledge in the foreign language. This result may be explained by the idea that group work delegates the learning responsibility to the learners themselves (Baines et al., 2009).

In consequence, analogous with Fareh (2010)'s finding that only in groups of up to four students, learning is accomplished at its full capacity, the present study observed that group work as a 'learning by doing' approach to learning, is affected by group size as a potential indirect variable of the effectiveness of the aforementioned learning method. Nevertheless, while substantiating the conception that group size and group effectiveness exist in an interdependent relationship wherein the variation of one affects the result of the other, the study has contradicted Davis (1993)'s finding which contends that learning in groups of four and five members yields the exact same learning results. Furthermore, apart from evidencing the limitations of collaborative learning in groups of more than four students for second language learning, the study also uncovered that the effectiveness of group work is not solely impacted by group size but rather by a triangulation of factors identified in this study as personality characteristics, cross-cultural differences and group size. Consequently, in addition to painting a complex picture of the inner-workings of group work and the moderators which impact its effectivity as a language-learning model, the present study has moreover accentuated the fact that its

implementation in the EFL classroom requires careful planning if to encourage active learning and language development.

Finally, in consonance with Alahdal (2019), whose research exhibited a positive figure with regards to the effectiveness percentage of group work, through Jacobs, Power & Loh's (2002) categories for effective CL as conceptual framework, the present study situated the effectiveness percentage of group work in fours on 66.67%. Conversely, the study concluded that the effectiveness of group work in groups of five for language development is negative; 42.86%, ergo, yet again substantiating the finding that group size has a direct effect on the benefits drawn from group work in the context of language learning.

8.0 Conclusion

The primary focus of the study was, firstly, to unveil the ways in which group work fosters language acquisition, secondly, to determine whether group size has an impact on the benefits of group work for language learning and thirdly, to investigate the effectiveness of group work in the Secondary EFL classroom using Jacobs, Power and Loh's (2002) principles for effective CL as framework.

First, in connection to research question number one, the study found that group work represents a favourable alternative to teacher-centred language-learning approaches as a result of the wide array of opportunities it confers, including peer feedback, which compel students to take an active role in their learning and develop a sense of learner autonomy. Moreover, the analysis reported that group work, formally associated with collaborative learning, generates the intimate and supportive learning conditions necessary for language practice to occur. Additionally, it was found that group work enables learners to receive linguistic support to further their linguistic competences in a foreign language through peer correction, which scaffolds an increasingly refined output in the L2. In close association with the supportive and encouraging learning environment enabled through group work, the study unveiled that group work grants learners the opportunity of posing language-related questions through clarifications and explicit questioning, enabling learners to negotiate their existent knowledge

in the L2. Likewise, the analysis concluded that group work encourages student participation which prompts language use. Therefore, it is plausible to assert that group work enables a shift from a subject-centred to a student-centred, nonauthoritative curriculum model. In other words, in encouraging individual accountability and participation, the implication is that besides making EFL learners protagonists of their own learning, they are generally allowed the freedom of demonstrating their mastery by taking up specific roles of their choice.

Second, regarding research question number two, the study found group size to be an important moderator of group work. Indeed, while compromising learners' willingness to participate, hence, affecting students' productivity levels, the analysis also revealed that language learning through group work may be hampered due to students' roles being imposed upon rather than democratically assumed by its participants. As a result, the present study suggests that instilling a collaborative classroom culture beforehand is paramount to ensuring successful group work within the context of EFL learning. However, unexpectedly, the analysis uncovered group size not to be the sole variable to affect the effectivity of group work, and pointed to personality and culture as additional moderators.

Third, with respect to research question number three, the study found group work to be an effective language-learning model after attaining a 66.67% effectiveness mean in groups of four students. Nevertheless, the same was not found in the case of group work in groups of five students as the analysis established its mean effectiveness on the negative value of 42.86%. Therefore, the paper advises for group work to take place, if possible, in smaller groups in the EFL classroom as group size and group effectiveness have been found to be directly proportional in the present study.

On a final note, this study based its analysis and its implications on an arguably small data sample, thus implying that any findings should be taken with some reservations. Moreover, all findings were based on the analysis of group work by 1st of ESO students (year 7 students), therefore, conclusions may not be generalised to all Secondary EFL classrooms. As a result, future research could address the former limitation by investigating group work in different Secondary year levels. Additionally, this paper examined group work through heterogenous groups, therefore, homogeneous grouping as a potential moderator which has not been investigated in this study, may be added for future analysis.

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10.0 Appendices

10.1 Appendix 1- Transcription group G1-4

Darío: intermediate/low-level learner, José: Advanced learner, Nassima: Low-level learner, Said: Low-level learner

Group of 4 (1st of ESO F- Darío, José, Nassima, Said) – 2.50m (G1-4)

1. D: a ver (.) vosotros cuando váis a comprar ↓ (.) que miráis ↑ (1) que tenéis en cuenta ↑

 $N g v \phi u$ " uy go "sh'oppijng gw h at do you look out for what do you bear in mind

2. S: es que hay veces que el ticket de no está [xxx

v j g " v j k p i " k u " v j c v " u q o g v k o g u " v j g t g ø u " p q "

3. N: pues <u>la talla</u>]

well the size

4. S: lo normal sería no romper el ticket creo yo (.)

I think the normal thing would be not to tear the ticket

- 5. N: la talla porque cuando vas a comprar [xxx
- 6. S: **SÍ** (.) **SÍ**] (1)

Yes yes

7. D: todos de acuerdo con la talla no↑ (.) ((Darío starts writing on the piece

of paper)) como se diría †

Everyone agrees on the size right

- 8. S: onoo(.)
- 9. J: check out the (.) size (1)
- 10. S: no en plan no romper el ticket osea (.)

no like not to tear the ticket

- 11. D: xxx
- 12. N: qué es eso↑

what does that mean

- 13. S: xxx
- 14. D: ((Darío looks at José sitting beside him for help))
- 15. J: S (1) E (1) D (1) E (.)
- 16. D: ((Darío writes the word as José spells it out for him)) vale que más tenéis en

cuenta↑ e: ya hemos dicho el precio (.) e: (.) la etiqueta y:

okay what else do you bg c t " k p " o k p f " " y g \emptyset t g " c n t g c f $\{$ " o g

and

```
the size
18. D: la talla\uparrow] (.)
       the size
19. S: E no ir tocando la ropa (.) no touch (.) osea no tocar la ropa que tú no vayas a
       utilizar (1) o (.) no: mezclar ropa [xxx
       not to be touching clothes I mean not touch clothes that you will not use
       to not mix the clothes
20. D: vale] estáis todos de acuerdo↑ ((looks at everyone for approval))
       Okay
              do you all agree
21. S: [SÍ
       ves
22. J: SÍ] (2.5)
       ves
23. D: ((Darío writes down the rule they've agreed on while the rest pay close attention))
24. J:
      no sería don't (1)
             i. pq"kv"yqwnf"dg"fqpøv
25. S: bueno no pasa nada (1.5) don't touch (1.5) porque es que muchas veces (1)
       pues hay ropa [mezclada
       clothes jumbled up
26. D: vale entonces ya tenemos [el precio
       Qmc { "uq"yg ø x g"iq v"vjg"rtke g
27. J:
       la (.) la ropa] que no vayas a comprar (.)
       v j g " e n q v jregnat g'oingjtocbuy" { q w ø
28. D:
       vale (.) clothes that you: (1)
       okay
29. S:
       [XXX
30. J:
       don't buy] (.)
31. D:
       ((Darío writes on the paper while José closely supervises him))
32. S:
        comprar es shopping no↑(1)
       to buy is
                         right
       ono (1)
33. D:
```

17. J:

[la talla†

```
No
                 no
                       no
35. D:
        ((Darío corrects the spelling on the paper)) vale nos queda la última (.) va
                                              q m c { " y g ø x g " i q v " q p g " n g h v
36. S:
        e: (1) no correr porque:
        not to run because
37. D:
        <u>no</u> pero sería xxx (2) vosotros miraríais de donde viene↑ (2)
                             would you look where it comes from
        no but it would be
38. S:
       no pero xxx es importante o algo (.)
       pq"dwv"""""""""kvøu"korqtvcpv"qt"uqog
39. J:
       hombre
        well
40. N: a ver yo no creo (.)
       lg \ v \ \phi \ u \ " \ u \ g \ g \ " \ K \ " \ f \ q \ p \ \phi \ v \ " \ v \ j \ k \ p \ m \ " \ u \ q
41. S: no
        no
42. J:
43. D: e: los materiales ↑ ((Darío looks at José and Nassima)) (1)
          the fabrics
44. S: SÍ (.) porque hay gente que tiene alergia a algunos materiales (1)
        yes because some people are allergic to some fabrics
45. D: [vale
       okay
46. J:
      vale] (1)
        okay
47. D: e: [cómo sería ↑
48.
          how would we say it
49. S:
        check] xxx
50. D:
        e: ((José sees Darío struggling to write the sentence))
51. J:
        fabrics (3.5)
52. D:
       [vale
        okay
53. J:
        sí]
```

34. J:

<u>**no**</u> buying <u>**no**</u> (.) bu:yɪη (2.5)

10.2 Appendix 2- Transcription group G2-4

Javier: Low-level learner, Waseem: Advanced learner, Marc: low-level learner, Inés: Intermediate learner

Group of 4- 1st of ESO C (Javier, Waseem, Marc, Inés) 3.30m (G2-4)

- 1. M: **cuando vamos a comprar algo qué miramos**↑ (.) when we go go shopping what do we look out for
- 2. W: **pues temenos que mirar la talla** ((while pointing at Javier)) (.) the size (1) we need

to look the size

well we have to look at the size

- 3. J: ((Javier starts writing down the idea)) (3)
- 4. W: ((while Javier is still writing Waseem helps his peer)) look (1) the (1) size (1) se:ze
- 5. M: también miramos [xxx

Also we look at

- 6. I: xxx
- 7. W: listen] listen to him ((while pointing at Marc))
- 8. M: también miramos si hay probadores (1) we also look to find out whether there are changing rooms
- 9. I: para probarnos la ropa (1)

To try out the clothes

10. W: ((pointing at his eye)) to look e: if (1) look (.) if (1) look if ((thinking hard))

(1.5)

If (.) the (.) the shopping centre have (1) probators (2)

- 11. M: probators ((giggling)) (3)
- 12. I: °if the°
- 13. W: IF THE ((while pointing to the mistake on the sheet of paper))
 ((Marc and Inés giggling in the background)) xxx so if (1) the (1) centre (3)
 if you are a girl(1.5)if you are a girl ((Javier starts writing))(1) you need to go to
 the: e: (.) girls' section if you are a xxx((Seeing that Javier is struggling to write

Waseem takes the sheet of paper to write)) escribo yo es que no te enteras

- 14. M: ((while Waseem writes, Marc and Inés discuss other ideas)) xxx (4)
- 15. I: **a ver quién escribe** \uparrow (2) a ver apunta $N g v \phi u$ "writes g " write "
- 16. J: look [at
- 17. I: osea siempe] es lo de mirar si está bien

Ygnn"kvøu"cnyc{u"cdqwv"nqqmkpi"kh"kvøu

- 18. M: xxx
- 19. W: ((Waseem writing)) xxx (2)
- 20. M: e: la ropa que esté xxx osea que no esté: manchada (1) que no esté por el suelo (1)

```
floor
21. W:
          ((Waseem points at Javier as he's got the paper and pen now)) e: (.) the(2) bueno
           the t-shits por ejemplo xxx (3) °cómo se dice ropa°↑
                                                                            well
                    for example
                                        how do we say clothes
22. M:
          que la ropa xxx (.)
          that the clothes
23. W:
          una cosa (.) cómo se dice [ropa↑
          One thing how do we say clothes
24. I:
          garments] sí (1)
                    Yes
25. W:
          NO the t-shirt xxx the t-shirt (1) no e:: xxx <NO (.) IT'S (.) IN (.) THE>(1)
   floor
          (1) dos xxx dos o's xxx (2) floor es sin s (1)
             26. J:
          ((Javier corrects the word's spelling)) xxx
27. W:
          e:: (1) que no sea: (2)
                v j c v " k v ø u " p q v
          I like (1) I like (.)
28. M:
          ff (1) if you like the: (.) the t-shirt
29. W:
30. J:
          ((Javier starts writing))
31. I:
32. W:
          también (3) how do you say t-shirts \( (1.5) \) if you like (.) LIKE xxx (1) the (2)
          that too
33. M:
          finished
```

v j c v " v j g " e n q v j g u " k u " p q v " " " " y g n n " v j c v " v j

10.3 Appendix 3- Transcription group G3-4

Damian: Advanced learner, Alejandro: Low-level learner, Gabriella: Intermediate/Low-level learner, María: Intermediate/Low-level learner

Group of 4 1E (Damian, Alejandro, Gabriella, María)- 10.10m (G3-4)

```
1. D:
        xxx(1)
2. M: I don't know ((looking at G1))
3. D:
       I don't know xxx <u>now</u> I'm thinking (2.5) maybe: (2.5)
4. G: podríamos poner lo de be careful with:: (.)
        We could put
5. D: with (1)
6. G: a:: (1) cómo se dice↑ (3.5)
        how do we say
7. D: with (6.5) maybe (.) be careful with brands that you don't know↑ °xxx empresas
      que no sabes como son (.) que no son de fiaro (.)
        e q o r c p k g u " v j c v " { q w " f q p ø v " m p q y " " v j c v " c t g " v
8. G: puede ser (.) puede ser ((nodding her head to assert)) (1)
        maybe
                   maybe
9. M: yes yes (1)
10. D: ((Damian starts writing)) (2)
11. G1: good Alejandro↑ ((while doing a thumbs up)) (1.5)
12. A: ((Alejandro nods to affirm))
13. D:
        sí sí (6) escribir una cada uno (1) so no:w (1) m: (3)
        yes yes write
                        one each
14. G: siempre es como un plan (1) como revisarlo (1) es (.)
        k v ø u " c n y c { u " n k m g " c " r n c p " " " " " " " " " " n k m g " v q
15. D: sí (1) more or less xxx
        yes
16. G: de donde es (.) en plan (1) made in Egypt (1)
17. D: cómo se dice↑ xxx
        how do we say it
18. G:
        Alejandro xxx (1)
19. D:
        check the country that (.) that (.) is (.) no xxx (2) saber de donde es (1)
                                                      to know where it comes from
20. G: claro (1)
```

right

```
21. D: de qué país (1)
       of what country
22. G: entonces sería check ((begins to write)) (1)
       so it would be
23. D:
       check (1.5) the country (.)
24. G: country ↑ (3)
25. D: country pro (.) production (1)
26. M: ((pointing to the paper)) que se escribe con igriega (1)
                               we write it with a y
27. D:
        ((Damian gets closer to G to check for himself)) (1)
28. G:
        perdón perdón (1) sorry sorry (1)
       sorry sorry
29. M:
        XXX
30. D:
31. G:
        espérate que lo corrijo ((reaches for her pencil case)) (6) the country e:: (2)
       y c k v "K ø o "i q k p i "v q "e q t t g e v "k v
32. D:
        of production (5)
33. G:
       vale así↑ (1.5)
       okay like this
34. D: <u>sí</u>(1)
        Yes
35. G: que se seque un poco (.) se está secando vale↑ xxx (3)
       Ngv"kv"ft{"hqt"c"dkv"""""""""kvøu"ft{kp
36. D: xxx at the same time (2)
37. G: xxx (1) entonces es así (.) así no↑
        Uq"kvøu"nkmg"vjku""""""nkmg"vjku"pq
38. D: ((Damian checks G's work)) (1) sí (1) yes (2)
39. G: your turn ((she passes the sheet of paper back to Damian)) (2) has flipado eh↑
                                                           [ q w " f k f p ø v " g z r g e v '
       ((Damian points directly at María and Alejandro)) (1) think about something (1)
40. D:
41. G:
42. D: it's your turn ((points at Alejandro)) (1) after you xxx (2)
43. G: look out for qué es\uparrow (1)
                  what does it mean
44. D: mirar em: xxx (2) se puede repartir supongo luego (4) look our fo::r (1)
```

I guess we can distribute it later

Look

```
45. G:
       xxx lo de la tela sabes\uparrow (5)
       about the fabrics you know
46. D:
       look out for the clothes that you like (1) maybe (.)
47. G:
       claro (1) o sinó si eres alérgico e: (.)
       of course or if not whether you are allergic
48. D:
        sí (2) look out for the (6) look out (2) material (.) look out for the material it
       was made (1)
       ves
49. G:
       ((to Alejandro)) te animas a escribirlo↑ ((María giggles)) (1)
                       want to try write
50. D:
        ((to María)) lo escribes tú↑ (1)
                 Do you want to write it
51. G:
        na na na na (.) tú tú sabes (.) tú escribes (2) please
       No no no no you know more you write it
52. D:
        ((Damian starts writing on the sheet of paper))
53. G:
        xxx (7)
54. D:
        okay (1.5) so now (.) think of something (2.5)
        we will qué sería↑ (1)
55. G:
        What would it be
       nosotros (1) nosotros (1) es que el will es como (1.5) es como un verbo de
56. D:
                                                                            futuro
        We
                          the thing is that will is like
                                                     a verb of
                                                                  the future
       pero lo tienes que acompañar con otra cosa (1) we will buy (.) we will buy (.)
       but you have to accompany it with something else
       no se qué (.) no se qué no se cuantos (.) es como nosotros va:mos xxx (3)
       57. G: check (.) to the: (1) the size (1) la talla (.) xxx te vas a llevar la grande↑ (1)
       the size
                    will you buy a big size
       pónte la pequeña sabes (1) vas a ir así (1) hay que pensarlo sabes
       58. D: who writes it \uparrow (1)
59. G: suya ((looks at María))
       Hers
60. D: escribes xxx
        Write
61. G:
```

62. M: ((María giggling in the background)) xxx

```
64. G:
        te dámos las ideas nosotros
       Y g \phi n n " i k x g " \{ q w " v j g " k f g c u
        sí sí sí xxx ((Damian starts writing))
65. D:
       Yes ves ves
       ((to Alejandro)) piensa en la sudadera que llevas (1) o en la mía xxx (1)
66. G:
                     v j k p m " c d q w v " v j g " j q q f k g " { q w ø t g " y g c t
       we miss only one (1) ((pointing at María)) think about something
67. D:
       ((pointing at María first and then Alejandro)) you and you (4) we have (1.5) only this one
       (6) okay ((Damian makes sounds while thinking hard)) (6)
       ((looks at Alejandro and Alejandro nods in negation back to G so as to suggest that
   he
       is not confident enough to speak or that he has nothing to say)) xxx (1)
        vale pues ya está xxx que vamos a comprar algo que nos guste (.)
       Qmc{"vjgp"Køxg"iqv"k vw'e likë' "vjcv"yg"yk nn"d w v
        Bua very intelligent ((they all giggle)) (1.5) a ver no sé xxx
70. G:
                                               ngvøu" ugg" K" f qpøv" mpqy
       Of course
71. D:
        XXX
72. G:
        nada más (.)
       nothing more
73. D:
        so:: (18)
74. G:
        Podemos poner algo como (1.5) en plan (.) la fábrica o: en plan (1) las
       máquinas
       we could put something like
                                  I mean
                                             the factory or I mean the
       machines
75. D:
       o el precio (.)
       or the price
       o el precio (.) porque si estás <u>pobre</u> sabes xxx (.)
76. G:
       q t " v j g " r t k e g " " " " " d g e c w u g " k h " { q w ø t g " r q q t " {
77. D:
       we will find something e: (1) osea que xxx
                                 I mean that
78. G:
       claro pero si es muy barato puede ser que sea malo (1)
       Qh"eqwtug"dwv"kh"kvøu"xgt{"ejgcr"oc{dg"kv
79. D:
       xxx o vamos a comprar alguna cosa (1) we'll buy something that we like and it e:
       or we will buy
                       something
       it will be cheap
80. G:
81. I:
        ((nodding with her head)) (3)
82. D:
       pues eso ((while writing)) (21) ya está
```

63. D:

[xxx

10.4 Appendix 4- Transcription group G1-5

Jorge: Intermediate learner, Rahim: Intermediate learner, Trishna: Advanced learner, Amin: Low level learner, Gisela: Low-level learner

```
Group of 5 1E (Jorge, Rahim, Trishna, Amin, Gisela)- 4.06 (G1-5)
1. T: e:: (1) so:: I will (.) I will (1) before going shopping (.) I will like to check (.)
        the clothes e:: (.) are e:: like the country in which are made the clothes (1)
2. R: [okay
3. G: okay]
4. T: ((Trishna begins writing on the paper)) (10) ((Trishna hands the paper to Amin))
5. A: okay e:m (10.5)
6. R: what xxx
7. A: °cómo era xxx<sup>o</sup> (1)
        how did we say
8. R: WHAT↑ (.)
9. J: lo puedes preguntar xxx↑
        You can ask
10. A: a:: xxx (.)
11. T: clothes
12. A: e:: (1) check (2) osea revisar cuanta roba tienes y: y el dinero que vas a pagar
                        K" o g c p " e j g e m " j q y " o w e j " e n q v j g u " { q
                        have to pay
13. T: (2) e:: (1) < check (.) how much clothes (1) they have> (1.3)
14. A: ((Amin begins writing)) sí
                               Okay
15. T: (1) <how (1.5)
16. A: sí
         Okay
17. T: (1) much (3) clothes (3)
18. A: they have (.)
19. T: they have> (4)
20. A: your turn ((Amin slides the paper to Jorge))
```

What

23. A: sí xxx cómo era label (.)

Yes how did you say label

21. J: oka:y (3) xxx vale voy a mirar xxx

Okay I will look for

- 24. T: e:: (.) label
- 25. J: ((Jorge begins writing)) xxx
- 26. T: the label
- 27. A: xxx
- 28. J: no (.) lab | No

```
29. T: no (1) lab 1
30. J: label (.)
31. A: NO (.) pero con b alta no↑ ((looks at Trishna for confirmation)) (1)
               but with a b right
        no
32. T: sí
        Yes
33. J: xxx the:
34. T: of the::
35. A: of the [colour
36. T: of the clothes] (1)
        okay ((Jorge finishes writing and hands the piece of paper to Gisela))
37. J:
38. G: (29) em:: (1)be careful wi:th (4.5) el precio cómo↑ ((asks Trishna and giggles)) (1)
                                          how do we say price
39. T: be careful with the pri:ce (1)
40. G: be careful with the price (1) pues eso (2) ((begins writing on the paper)) (1.5)
                                     exactly
41. T: sabes cómo se escribe↑ (1)
42. J: [sí sí
        yes yes
43. G: sí]
        Yes
44. A: pr ze es (1)
        k v \phi u " r t k e g
45. J: con c (1)
        y k v j "c" \tilde{o} e \ddot{o}
46. T: <u>sí</u>(1.5) yes (4)
       Yes
47. G: ((She hands the paper over to Rahim))
48. J: now (1) your turn (1) your turn
49. R: xxx (5)
50. T: othe size (1.5) m:: (1) check (1) the size (.) of the clothes (4)
51. R: ((Rahim starts writing on the paper)) xxx (1)
52. A: ((Amin gets closer to Rahim to check what he's writing))
53. T:
        size is ese (.) e: (.) zeta (.) e (1) of (1) the clothes (2) so:: we've finished (.)
                es
                          zed
                                 e:
54. A: ya está
         done
```

10.5 Appendix 5- Transcription group G2-5

Vicente: Advanced learner, Julián: Low-level learner, Iván: low-level learner, Saima: Low-level learner, Wailani: Intermediate/low-level learner

Group of 5: 1st of ESO C: (Vicente, Julián, Iván, Saima, Wailani)- 4:36 (G2-5)

Transcription starts at 00:21

- 1. W: ((addressing Saima)) sabes lo que hay [que hacer↑ do you know what we have to do
- 2. S: ((Saima nods to assert))
- 3. V: ((Vicente and Iván are talking about the task)) a ver xxx aunque sea la etiqueta xxx

n g v ø u " u g g " " " " " " g x g p " at the label

4. W: os habéis enterado major que yo] ↓

/00:34-00:46= unintelligible material/

5. V: **básicamente mirar que no esté hecho polvo** ((Vicente says the former to Julián))

d c u k e c n n { " e j g e m " v j c v " k v ø u " p q v " f c o c i g f

- 6. I: xxx (.)
- 7. J: ((Julián nods in assertion))
- 8. W: ((placing the paper in front of Iván)) xxx pues haces la primera xxx (.)

then you do the first one

- 9. I: xxx ((Iván now places the paper in front of Vicente)) (1)
- 10. W: xxx ((Wailani slides the paper across the table and places the paper in front of Iván again))

/00:58-01:52= unintelligible data/ ((during this interval the group seems off-task due to the fact that the other group has just finished the task and is leaving the classroom. For some reason this distracts this group)).

11. W: bueno (.) también quiero decir que: (1.5) [xxx

well I also want to say that

- 12. V: xxx1
- 13. W: **VENGA::** (14) xxx ponemos lo de la etiqueta (1)

```
15. W: ((Wailani checks Saima's clothing label))
16. V: [xxx
17. J:
       XXX
18. I:
       xxx](.)
19. W: cincuenta por ciento algodon (1) cincuenta por ciento poliester (1.5)
       fifty
                percent
                           cotton
                                       fifty
                                                percent
                                                          polyester
20. V: dónde está hecho↑ (.)
       where was it made
21. W: na:: que no lo veo↓ (1) fabricado en España (1.5)
       no K" e c p ø v " h k p f " k v " " " " " " " o c f g " " " " " "
22. V: buena calidad (1) pues eso (1) mirar en qué país del mundo está hecho (1) es
        [decir
       good quality
23. J:
       xxx] (1.5) que no sé (.) nos estamos desviando [xxx
                K" f q p ø v " m p q y " " " y g ø t g " f t k h v k p i " q h h
24. W: pero] si es [de esto
       dwv"ygøtg"vcnmkpi"cdqwv"vjku
       pero estamos haciendo lo que temenos que hacer ((to Julián)) (3.5)
       bw v " y g ø t g " f q k p i " y j c v " y g ø t g " u w r r q u g f " v q
26. W: a ver escribe↑ ((to Iván)) (1)
       lg v ø u " u g g " y t k v g
27. I:
       ((Iván puffs and blows to convey slight disconformity)) (1.5) no sé ni
                                                            K" f q p \phi v " m p q y
       lo que xxx haciendo ((to Vicente while Vicente giggles slightly)) (1.5)
       what
                 doing
28. W: ((looking at Iván's clothing label)) sale que:: (.) es de china (1) que (.)
                                     k v " u c { u " v j c v " " " " k v ø u " h t
        a ver de qué te ríes ((to Vicente)) (.) china tiene una calidad que mira
      what are you laughing about
                                         Look China has a quality that
29. V: xxx ((Vicente, Julián and Saima Giggle))
30. W: xxx (1)
```

we could put something about the label

come on

14. V: ((Vicente giggles)) xxx (2.5)

31. V: xxx (2)

32. W: bueno (1.5) la mayor parte de ropa se está fabricando (.) o en bangaldesh (1) o en china (1) Well the majority of clothes are being made or in or in China Bangladesh 33. V: y la india también (.) and in India too 34. W: bueno xxx well 35. V: xxx (2.5) 36. W: **entonces** (1) **e:m** (1.5) well then 37. V: osea (.) si decimos comprar ropa xxx (.) entonces que no sea un noventa por ciento (.) treinta por ciento (1) xxx (.) I mean If we decide to buy clothes vjgp"ocmg"uwtg"vjcv"l thirty percent percent 38. W: normalment el ochenta por ciento está hecho en china↓ (1) o(.) en asia (.) Normally eighty percent is made in China or in Asia ((the school bell rings)) (6) 39. J: ((to the teacher)) una pregunta↑ (1) nos quedamos aqui hasta que hagamos I have a question should we stay here until we finish eso↑ (3.5) osea que nos saltamos xxx this skip so we

/the camara is stopped at 04:36 although the group has not finished the activity yet after having worked on it for a total of 04:36 minutes/

Antonio José: Advanced learner, Borja: low-level learner, Jia Li: low-level learner, Aitor: low-level learner, Jaime: low-level learner

Group of 5-1st of ESO F (Antonio José, Borja, Jia Li, Aitor, Jaime)-03:28 (G3-5)

rule

- AJ: vamos sí↑ (.) next time we go shopping what will happen↑ (1) n g v ø u " u v c t v " { g u
 J: yes yes (2) okay e:: WHAT (1) regla ((giggling)) (1)
- 4. J: yes yes (1.5) is (.) **es** (2)

3. AJ: what rule (.) what (.)

is

- 5. B: e::m (1)
- 6. AJ: checking something↑ (.)
- 7. B: check the: logo ((looking towards Antonio José))
- 8. J: podem fer (1) <que mirem la etiqueta de on ve la roba> (.)
- 9. AJ: **vale** ((starts writing on the paper)) (17.5) next one *Okay*
- 10. B: e::m (.) la de:: què està feta la roba:↓ (1) vale↑

 The one on what clothes are made of okay
- 11. AJ: ((He begins to write again)) (10.5)
- 12. J: come on (.) come on (3.5)
- 13. A: xxx (.)
- 14. AJ: mmm (.)
- 15. B: **de dónde es** [xxx where is comes from
- 16. AJ: we can check where is the brand↑ (1)
- 17. B: yeah (1)
- 18. J: yeah
- 19. B: xxx (7)
- 20. AJ: what else \uparrow (1.5)
- 21. A: e:: xxx (1)
- 22. J: podem fer també que:: la tercera regla sigui:: \uparrow (1.5)

We could also make that the third rule be

```
23.
     B:
          anem per la quatre (1)
          y g ø t g " q p " p w o d g t " h q w t
24.
          four(1)
     A:
25.
     J:
           que:: (2.5) que sigui (1) e:: roba feta per (1) màquines \uparrow (.)
           That
                       that
                                   clothes be made by machines
26. AJ:
          vale(.)
           okay
27. A:
           vale xxx
            okav
28. AJ:
           (1) i que no∷ no explotació (.) no↑ (.)
              apf"vjcv"vjgtgøu"pq"gzrnqkvcvkqp"pq
29.
     J:
            yes
30. AJ:
           vale ((he begins writing)) (1) clothes (.) e::
31.
     B:
            [made in the (.) machines
32.
            i que també intenti] (1) osea que sigui: de països on hi ha
     J:
             menys explotació (.) com per exemple la india (.) xxx
             and that they try
                                I mean that is comes from countries where there is
             less exploitation
                                  like for example
                                                     India
 33.
       A:
            sí sí
             Yes yes
 34.
       J:
            china (1) japón (1)
            China
                     Japan
 35.
       A:
            xxx (5) la última
                   the last one
 36. AJ:
            (12.5) ((writes on the sheet of paper))
             intentem que la roba sigui d'aquí (.) d'espanya (4)
 37.
        J:
             Ng v ø u " v t { " h q t " e n q v j g u " v q " d g " o c f g " j g
 38.
       A:
             xxx(.)
 39.
      AJ:
            mmm (.)
 40.
       A:
             xxx(2.4)
 41.
             perquè si la comprem d'altres països pot ser que hi hagi: explotació
        J:
             infantil (1) o explotació amb persones
              because if we buy it from other countries it might be the case that there
             is child exploitation or people exploitation
42.
        B:
             y aquí no ha:y\(^(.)
```

y aquí no hay explotación↑ (1)

43.

A:

 $c\ p\ f$ " $v\ j\ g\ t\ g\ \phi$ u " $p\ q\ p\ g$ " $j\ g\ t\ g$

```
c p f " v j g t g ø u " p q " g z r n q k v c v k q p " j g t g
44.
         J:
              no hay xxx (.)
              v j g t g \phi u " p q
45.
       AJ:
             ya (.) ya
             yes yes
46.
        A:
              xx[x]
47.
        B:
              e:l]xxx (1)
              the
             a: (.) vale ((writes on the paper)) (.)
48.
      AJ:
                   Okay
49.
               yes (1) yes ((continues writing)) (9)
        A:
               deja↑ xxx ((makes Jaime stop fidgeting with the hand sanitiser))
50.
        B:
               stop
              (9.5)((He continues writing)) <u>va está</u>† ((puts the pen down on the
51.
      AJ:
               table)) (1)
                                          Finished
52.
        J:
               okay↑ (1) FINISHED↑
```

Table 4.0 participants' roles in category GX-4

Group	Student	Role	Performed (yes/no)
G1-4	Darío	writer	Yes
G1-4	José	L2 facilitator	Yes
G1-4	Nassima	Idea provider	Yes
G1-4	Said	Idea provider	Yes
G2-4	Marc	Idea provider	Yes
G2-4	Waseem	L2 facilitator/ Idea	Yes
		provider	
G2-4	Inés	Idea provider/ L2	Yes
		facilitator	
G2-4	Javier	writer	Yes
G3-4	Damian	L2 facilitator/ Idea	Yes
		provider	
G3-4	Gabriella	Writer/ Idea	Yes
		provider	
G3-4	María	'checker'- checks	Yes
		written output	
G3-4	Alejandro	Idea provider	No

10.8 Appendix 8- Student participation in groups of five

<u>Table 5.0- Student participation in groups of 5</u>

Group	Student	N° of turns
G1-5	Trishna	19
G1-5	Amin	14
G1-5	Rahim	5
G1-5	Gisela	5
G1-5	Jorge	10
G2-5	Vicente	13
G2-5	Julián	2
G2-5	Iván	4
G2-5	Saima	0
G2-5	Wailani	16
G3-5	Antonio José	16
G3-5	Aitor	11
G3-5	Borja	11
G3-5	Jaime	14
G3-5	Jia Li	0

10.9 Appendix 9- An example of refined output through peer correction (group G2-4)



Image 1.1- Example of refined output through peer correction

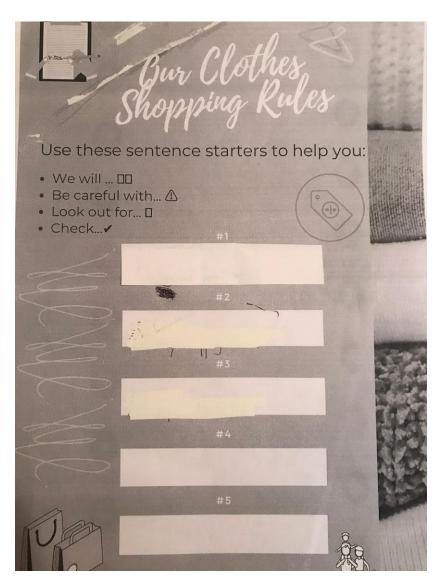


Image 1.2- No written output produced by group G2-5

10.11 Appendix 11- Supportive language-learning techniques used by group G1-5

Table 2.0 Supportive language-learning techniques deployed in group G1-5

Type of language- learning strategy	Example(s)	N° of instances
Explicit question formulation	 7. A: °cómo era xxx↑ (1) how do we say 23. A: sí xxx cómo era label↑ (.) yes how did we spell label 38. G: (29) em:: (1) be careful wi:th (4.5) el precio cómo↑ how do we say price 	3
Clarifications	 31. A: NO (.) pero con b alta no↑ ((looks at Trishna for for confirmation)) no but with a b no 45. J: con ze (1) with a c 	2
Spelling peer correction	28. J: <u>no</u> (.) lab 53: T: size is ese (.) e: (.) zeta (.) e	2

10.12 Appendix 12- Supportive language-learning techniques used by group G3-5

Table 3.0 Supportive language-learning techniques deployed in group G3-5

Type of language- learning strategy	Example(s)	Nº of instances
Correction or other- initiated other repair	2. J: yes yes (2) okay e:: WHAT (1) regla ((giggling)) <i>Rule</i> 3. A: what rule (.) what	1

10.13 Appendix 13- Transcription symbols

Transcription symbol	Function	
(())	Non-verbal activity	
(.)	Micropause	
Bold text	Speech in a foreign language	
\downarrow	Falling intonation	
\uparrow	Rising intonation	
	Overlapping speech	
xxx	Unintelligible speech	
(x seconds)	Timed pause	
:	Elongated sound	
ō ō	Speech delivered more quietly than	
	surrounding speech	
<u>Underlined text</u>	Speaker emphasising the speech	
Italic text	English translation of foreign language	
	speech	
CAPITAL LETTERS	Speech delivered louder than the	
	surrounding speech	
<>	Speech delivered more slowly	
aɪ, ə, ŋ	Phonetic transcription	

10. 14 Appendix 14- Video-recorded data

Contact the researcher to be granted access to the videos.

Link to the video-recordings:

https://youtu.be/jYIAuM0xUto - Group G1-4

https://youtu.be/9pmtNw1kntg - Group G2-4

 $\underline{https://youtu.be/vhgL9ZygN5I} - Group~G3-4$

 $\underline{https://youtu.be/_hJZBZoSqgs} - Group\ G1\text{-}5$

https://youtu.be/cHI2A5ZZDw0 - Group G2-5

 $\underline{https://youtu.be/cU9JIXot3X8} - Group \ G3-5$