HACETTEPE ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ

Department of Foreign Language Education
English Language Teaching Program

AN INVESTIGATION INTO COLLABORATIVE BEHAVIOURS IN TASK-BASED FOREIGN LANGUAGE PEER INTERACTIONS

Kadriye AKSOY

Ph.D. Dissertation

Ankara, 2018

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YABANCI DİLDEKİ GÖREV TABANLI AKRAN ETKİLEŞİMİNDE İŞBİRLİKÇİ DAVRANIŞLAR ÜZERİNE BİR ARAŞTIRMA

Kadriye AKSOY

Ph.D. Dissertation

Ankara, 2018

Acceptance and Approval

To the Graduate School of Educational Sciences,

This thesis entitled "AN INVESTIGATION INTO COLLABORATIVE BEHAVIOURS IN TASK-BASED FOREIGN LANGUAGE PEER INTERACTIONS" has been approved as a thesis for the Degree of **Ph.D.** in the **Program of Foreign Language Education/English Language Teaching** by the members of the Examining Committee.

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This is to certify that this dissertation has been approved by the aforementioned examining committee members on 20/06/2018 in accordance with the relevant articles of the Rules and Regulations of Hacettepe University Graduate School of Educational Sciences, and was accepted as a **Ph.D. Dissertation** in the **Program of Foreign Language Education/English Language Teaching** by the Board of Directors of the Graduate School of Educational Sciences on ...../...../.....

Prof. Dr. Ali Ekber ŞAHİN
Director of Graduate School of Educational Sciences

Abstract

The present study investigated the effect of task type and group structuring on learners' collaborative behaviours during L2 task-based peer interaction from a sociocultural perspective. A total of 15 learners who were studying English at an intensive language programme participated in a speaking club as an extracurricular activity in groups of four or five. They were assigned two different types of speaking tasks; namely convergent and divergent tasks, in two group structuring conditions; namely unstructured and structured. The emerging interactions from these tasks were analysed through applying a grounded qualitative analysis. The results suggest that learners employed 13 different collaborative behaviours which were grouped under language-related and task-related collaborative behaviours. There were eight language-related and five task-related collaborative behaviours. A frequency analysis of these collaborative behaviours was later conducted to draw conclusions on the effect of task type and group structuring. Overall, the quantitative findings showed that learners displayed language-related collaborative behaviours more frequently in convergent tasks. On the other hand, task-related collaborative behaviours were more frequently observed in divergent tasks. Additionally, learners displayed more collaborative behaviours during unstructured tasks than structured tasks. Language-related collaborative behaviours were more frequently employed in unstructured tasks while task-related collaborative behaviours were more frequently employed in structured tasks. These findings suggest both task type and group structuring had an impact on learners' overall use of collaborative behaviours. Additionally, individual collaborative behaviours showed a difference in frequency between divergent and convergent tasks. Moreover, they showed a difference in frequency between unstructured and structured tasks.

Keywords: collaboration, collaborative behaviours, convergent and divergent tasks, peer interaction, sociocultural theory, task-based interaction.

Öz

Bu çalışmada, sosyo-kültürel bakış açısıyla görev tabanlı yabancı dildeki akran etkileşimi esnasında görev tipi ve grup yapılandırmasının öğrencilerin işbirlikçi davranışları üzerindeki etkisi araştırılmıştır. Bir devlet üniversitesinin İngilizce hazırlık programındaki 15 öğrenci, ders dışı etkinlik olarak düzenlenen bir konuşma kulübüne dört veya beş kişilik gruplar halinde katılmışlardır. Bu öğrencilere konuşma etkinlikleri sürecince yapılandırılmamış ve yapılandırılmış olarak tek-çıktılı ve çok-çıktılı konuşma görevleri uygulanmıştır. Öğrencilerin görevleri tamamlamaları esnasındaki ortaya çıkan etkileşimler, temellendirilmiş bir nitel analiz yöntemi uygulanarak analiz edilmiştir. Elde edilen bulgulara göre, öğrencilerin 13 farklı işbirliği davranış biçimi kullandıklarını göstermektedir. Bu davranışlar, dilsel ve görevsel olmak üzere iki ana gruba ayrılmışlardır. Dilsel sekiz ve görevsel beş farklı işbirlikçi davranış bulunmuştur. Görev tipi ve grup yapılandırmasının işbirlikçi davranışların üzerindeki etkisini görebilmek amacıyla bir frekans analizi yapılmıştır. Nicel bulgular, öğrencilerin dilsel işbirlikçi davranışları daha fazla sergilediklerini göstermiştir. Dilsel işbirlikçi davranışlar tek-çıktılı görevlerde daha sık gözlenmiştir. Öte yandan, çok-çıktılı görevlerde görevsel işbirlikçi davranışlar daha sık gözlenmiştir. Bunlara ek olarak, öğrencilerin yapılandırılmamış görevlerde yapılandırılmış görevlere kıyasla daha fazla işbirlikçi davranışlar sergiledikleri gözlemlenmiştir. Dilsel işbirlikçi davranışlar, yapılandırılmamış görevlerde daha sık kullanılırken, görevsel işbirlikçi davranışlar yapılandırılmış görevlerde daha sık gözlemlenmiştir. Bu bulgular, hem görev türü hem de grup yapılanmasının öğrencilerin işbirlikçi davranışları genel olarak kullanmalarını etkilediğini göstermektedir. Ayrıca, her işbirlikçi davranış sıklığı tek-çıktılı ve çok-çıktılı görevlerde farklılık göstermiştir. Benzer şekilde, her işbirlikçi davranış sıklığı yapılandırılmamış ve yapılandırılmış görevler arasında farklılık göstermiştir.

Anahtar sözcükler: işbirlikçilik, işbirliğine dayalı davranışlar, tek-çıktılı ve çok-çıktılı görevler, akran etkileşimi, sosyokültürel yaklaşım, görev-temelli etkileşim.

To my family, Mine Şeref, Mehmet, Tuğba, İsmail, Erdem and,

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Symbols and Abbreviations

ACMC: Asynchronous Computer Mediated Communication

CALL: Computer-Assisted Language Learning

CEFR: Common European Framework of Reference for Languages

CF: Corrective Feedback

CLT: Communicative Language Teaching

CMC: Computer Mediated Communication

CSC: Collaborative sentence completion

EFL: English as a Foreign Language

F-LREs: Form-focused language related episode(s)

FTF: Face-to-face

IRF: Initiation, Response, Feedback

LRC: Language-related collaboration

LRE(s): Language-related Episode(s)

L-LREs: Lexical Language Related Episodes

L1: First language

L2: Second/Foreign Language

MO: Modified Output

NL: Non-target Language

SCT: Sociocultural Theory

SCMC: Synchronous Computer Mediated Communication

SLA: Second Language Acquisition

TBLT: Task-Based Language Teaching

TL: Target Language

TRC: Task-related collaboration

ZPD: Zone of Proximal Development

Chapter 1
Introduction

This introductory chapter starts with a brief description of the background to the study. It then states the research problem and the gap in the literature followed by the aim and significance of conducting this research with the aim of filling this gap. Later, the general and specific research questions regarding the aim of the study are addressed. Following this, assumptions about the research and the limitations of the study are presented. The chapter will finally provide the definitions of the key terms addressed throughout the study.

Statement of the Problem

During the readings for the comprehensive exam to pursue my studies in doing a PhD, I really enjoyed reading the studies based on classroom research and particularly how learning is shaped through interaction in the classrooms. According to social perspectives, sociocultural theory (SCT) in particular, learning is embodied in interaction and it is a social process as well. In order to understand the interplay between learning and interaction, Seedhouse and Walsh (2010, p. 127) suggest investigating classroom interaction first. In L2 classrooms, learning or knowledge is co-constructed with other people, between teachers or learners, through interaction.

Sato (2013) claims that in foreign language (L2) contexts, learners do not find enough opportunities to engage in social interaction both outside and inside of the classroom. Additionally, there is the dominance of teacher talk due to some pedagogical reasons (for further information see Sato & Ballinger, 2016, p. 8) in the classrooms and teacher-learner interaction in a classroom setting allocates very little time for each learner (Harmer, 2001). These facts shed a light on the need of opportunities in which learners could engage in meaningful interaction (Sato & Ballinger, 2016, p. 8).

To overcome these problems, Sato and Ballinger (2016) suggest using peer interaction activities since they create opportunities for everyone to speak and participate in social interaction (p. 8). Besides, according to Blum-Kulka and Snow (2004), peer talk has the following contextual features of a "collaborative,

multiparty, symmetrical participation structure" (p. 291). Investigating peer interaction provides a richer view of L2 development, showing what learners can do with language and how language development occurs in turn by turn interaction.

Although there are studies investigating the effectiveness of peer interaction since the early 1980s, Sato and Ballinger (2016, p. 1) suggest that peer interaction still gets less attention when compared to other types of interaction and there are more studies conducted on peer interaction in second language classrooms than in foreign language classrooms (Garcia Mayo & Azkarai, 2016, p. 242). Besides, previous studies on learner-learner interaction have been mostly conducted in accordance with interactionist perspective which analyses interaction focusing on negotiation for meaning, modified output, negative and also positive feedback (Fernandez Dobao, 2014b). Therefore, language was viewed as separate from its social context, and the data were gained by using experimental tasks (Ohta, 1995).

According to sociocultural researchers, however, interactionist perspective reflected by cognitive theories can explain only a partial picture of language acquisition (Sato & Ballinger, 2016, p. 11). Sociocultural researchers view L2 learner-learner interaction as a place for collaborative construction of and engagement in activities between novice and expert, except from being a place for negotiation of meaning (Ohta, 1995). Foster and Ohta (2005, p. 403) also argue that the learner is not the sole owner of knowledge; but cognition and knowledge are social and dialogically constructed (Lantolf, 2012). During peer interaction, learners are mostly able to solve each other's problems and co-construct new language knowledge (Antón & DiCamilla, 1998; Donato, 1994; Ohta, 2000, 2001; Swain, 2000; Swain & Lapkin, 1998). Furthermore, according to sociocultural researchers, co-construction of knowledge (or scaffolding) emphasizes collaboration (Sato & Viveros, 2016, p. 92).

From the point of sociocultural perspective, interaction has been analysed as an opportunity for learners to scaffold each other and to collaborate in the resolution of their language-related problems. Swain and Lapkin (1998, p. 89) refer to "any part of dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others" as

language-related episode (LRE), what Swain (2006, p. 98) refers as “languaging”. Through the use of LREs which are seen as the sources of learning, learners build new knowledge by using language to think and talk about language (Fernández Dobao, 2016, p. 34).

There are a number of studies that examined peer interaction using LREs as a measurement of its effectiveness (Storch & Aldosari, 2013) and evidence varying degrees of collaboration by identifying and analysing LREs (Storch, 2011). Moreover, Sato and Viveros (2016, p. 94) argue that a most common unit of analysis used to understand collaboration is language-related episodes (LREs) (Swain & Lapkin, 1998). However, since SCT has favoured detailed ‘micro-genetic’ analyses of dialogic interaction, there is a need to conduct detailed analyses of the way how collaboration actually occurs (Ellis, 2003).

Sato and Ballinger (2016, p. 14) provide five variables that are essential to investigate in peer interaction such as "the impact of task type, mode of interaction, proficiency level, learner relationships, and pedagogical intervention on learners’ interactional behaviours and language production". Researchers have investigated the relation between these variables and how the learners collaborate in peer interaction. Philp, Adams, and Iwashita (2014) state that when learners engage in peer interaction even as a part of a planned activity, they complete mostly L2 tasks. It is not surprising, therefore, that task type has attracted researchers a lot to investigate in peer interaction (Skehan, 2014).

One of the concerns of SCT researchers is also how performance is dependent on the interaction of the individual and task (Appel & Lantolf, 1994) since the same task can result in different kinds of activities when performed by different learners as well as when performed by the same learners at different times (Lantolf & Thorne, 2006, p. 233, Activity theory). Sociocultural theory emphasizes that the activity deriving from a task is unstable, and it changes according to the specific goals and motives of the participants (Ellis, 2008, p.822). Therefore, two key terms emerge from this view: task-as-workplan and task-in-process (Seedhouse, 2004). Seedhouse defines task-as-workplan as the intended pedagogy, the plan prior to classroom implementation of what participants will do as a teacher and learners. On the other hand, task-in-process is the actual pedagogy or what actually happens in the classroom. Empirical data are gathered

from task-in-process, and it actually requires an emic perspective for investigating (Seedhouse, 2005) without bringing apriori categories. van Compernolle (2015, p. 200) states that L2 interaction research drawing on Vygotskian psychology adopt a qualitative approach to data analysis and when external' or etic' coding schemes are applied to interactional data, there is the rick of understanding participants' orientations to the interactional phenomena in a misleading way.

Using group work does not guarantee collaboration among learners. For example, Storch (2002) found that not all students work collaboratively during peer interaction and they may deliberately avoid negotiation of meaning and do not indicate nonunderstanding in order to save face (Philp et al., 2014, p. 48). They prefer referring to shared L1 and common context to understand what others might be trying to say. There are also other studies showing that learners avoid providing corrective feedback to peers due to the reasons such as perceived inappropriateness, low proficiency, face-saving, and the desire to focus on communication rather than grammatical accuracy. These all prove that collaboration between peers may be strongly associated with personality combinations, perceptions of self and other, past histories, and experiences (Kim & McDonough, 2008; Storch, 2002; Watanabe & Swain, 2008).

Philp et al. (2014, p. 137) inform us about how teachers can shape the classroom experience to help learners engage in tasks through strategic grouping of participants (Storch, 2002), assigning task roles according to proficiency task roles (Yule & Macdonald, 1990), prior instruction or modelling of interactional strategies (Kim & McDonough, 2011), post-task feedback (Gibbons, 2003), and prior training in interpersonal skills (Dörnyei & Murphey, 2003). The social dynamics of peers in groups or pair interactions greatly affect learners' ability to profit from each other (Sato & Ballinger, 2016, p. 19). Group roles (Dörnyei & Malderez, 1997) in peer interaction are said to be of great importance to the productivity of the group since if learners hold the right role in the group, they will become useful members of the team, and vice versa. These roles may emerge naturally among the members, or teachers can distribute the roles for everyone. Moreover, Dörnyei (2007, p. 724) says explicitly marked roles has the advantage of preparing learners to perform the roles effectively. However, to date, only there studies have been conducted on the effect of task role in peer interactions. Both

Yule and McDonald (1990) and Jenks (2007) allocated the roles to the participants based upon their proficiency levels. Moreover, Yule and McDonald (1990) investigated the interactions from ESL settings. A recent study by Dao and McDonough (2017) focused on EFL adult learners from mixed proficiency level on collaborative writing tasks. This indicates that there is still a need to further look into the effect of assigning group roles on learners' collaboration.

Aim and Significance of the Study

Based upon the previous ideas, my first aim is to investigate peer interaction since the studies showing the benefit of collaboration have been mostly conducted in ESL classrooms which are different from EFL classrooms. Moreover, there is not a comprehensive study that investigates learners' interactions in Turkish context, which is a foreign language context of English. Although Seedhouse and Walsh (2010, p. 127) looking at the classroom interaction state to understand learning and there have been few studies which investigated peer interactions in real classrooms (Kos, 2013), this study is based on an extra-curricular activity (e.g. speaking club) rather than in the real classrooms. The reason is that the teachers have always a set curriculum for them to cover in the classrooms and they do not allocate time for peer interactions during the regular classrooms in the current research context. However, it is acceptable to conducting such research on peer interaction since Sato and Ballinger (2016, p. 7) state that peer interaction can be assigned in any learning environment such as in the classroom, outside the classroom or in a virtual environment.

Previous studies on learner-learner interaction have been mostly conducted in experimental settings, and the analysis is carried out input-output models of language learning. Adopting a sociocultural theory, the collaboration that is conducive to L2 learning in peer interaction will be the main focus of this study.

Peer interaction in the form of a group can be used to encourage learner participation in the classroom (Ellis, 2012, p. 13). Furthermore, there are studies which show the benefit of having a small group interaction over pair interaction (Fernandez Dobao, 2016, p. 35). However, there are fewer studies that examined the interactional patterns in peer interaction without the intervention of the teacher (Loewen and Wolff, 2016, p. 165).

My second aim is to investigate the effect of different tasks types on learners' collaboration. Fernandez Dobao (2016, p. 35) claims that EFL teachers should know about the types of tasks that would be more beneficial for their students. Although task types have been investigated much, they have not been investigated along with assigning group roles to the participants yet. Group roles have important implications for peer-peer interaction; however, it is not investigated in EFL settings with the same proficiency level adult learners.

Collaboration in peer interaction has been investigated mostly by either LREs or collaborative dialogue (Sato & Viveros, 2016). However, since SCT has favoured detailed 'micro-genetic' analyses in a task-based research, there is a need to conduct detailed analyses of the way how collaboration actually occur while learners performing a task (Ellis, 2003) instead of bringing etic categories to analyse the data. Therefore, adopting a grounded theory, the collaboration between learners as a group will be defined and collaborative behaviours will be categorised applying a constant comparison method.

This study can be summarised to contribute to the peer interaction research in the form of a group work from a sociocultural perspective in an EFL context. It will also contribute to the concept of collaboration in a task-based interaction, and the collaborative behaviours will emerge from the data through a grounded theory. The study is also significant in its contribution to the social dynamics of peer interaction in that assigning roles in different tasks will be examined closely. In order to accomplish the aims of the study, the following questions are formed:

Research Questions

What kind of collaborative behaviours do learners employ in L2 task-based peer interaction?

Sub research questions.

1. Is there an impact of different task types on learners' L2 production?
2. What collaborative behaviours do the learners display in L2 task-based group interaction?
3. What are the most frequently observed language-related and task-related collaborative behaviours?

4. Do the types of tasks exert any impact on anguage-related and task-related collaborative behaviours?
5. Do assigning group roles to the participants have any impact on anguage-related and task-relatedcollaborative behaviours?

Assumptions

The present study was conducted under the assumptions that independent variables such as motivation, attitudes and pre-existing ability of the learners would be constant among the learners. These also would be constant from the beginning of the study to the end. The perceived language proficiency of the learners would be similar. All the learners would be willing to participate in group discussions and equally participate in the group work.

Limitations

The limitations to this study can be summarised as below:

Due to its qualitative nature, it was not possible to work with larger groups of participants. Therefore, the study had to be conducted with 15 learners.

Additionally, the number of participants in the groups was not constant throughout the whole data collection process. To make it clear, during the first four tasks, there were three learner groups; however, only two groups could be formed for the remaining last four tasks. This also resulted in the circulation of the group members. Although it was planned to work with the same learner groups, due to the decrease in the number of participants, the groups had to be reformed by circulating the participants between groups.

Another limitation is the Hawthorne effect, which is defined as “participants perform differently when they know they are being studied” (Dörnyei, 2007, p.53). My presence as a non-participant observer and researcher might have affected learners’ behaviours compared to regular classrooms.

Another limitation was the choice of the tasks. The learners stated explicitly their dissatisfaction with the topic choice in some tasks.

There was not enough time to understand learners’ individual characteristics before the assignment of the group roles to the participants.

Therefore, the assignment of the group roles was accomplished randomly without taking into consideration individual differences. If certain roles had been assigned to particular learners, the results might have been different.

The assigned roles had to be changed as well due to the regrouping of the learners. Only a few learners practised the same role during the structured group assignments.

Since the study lasted for approximately two months, there was an observable decrease in the learners' motivation to participate in the speaking club.

Definitions

Second language/foreign language (L2): L2 has been used as a second language learned in addition to the first/native (L1) language without making a distinction between foreign and second language. The terms EFL and ESL have been used where a distinction is to be made.

Learning/acquisition: These terms have been used interchangeably without making a reference to the context in which the L2 is learned.

Peer interaction: Peer interaction is defined as the interaction going on between learners. It could be in the form of dyadic including pair-pair interactions or in the form of a group interaction including more than two learners. In this particular study, peer interaction is referred to group interaction which involves more than two learners.

Collaboration: It is defined as the process that occurs when learners create opportunities for learning through their deliberation on language, provide each other with the help, which might be either solicited or unsolicited, to keep the flow of the activity emerged from the task.

Task: A task is a meaning-focused activity which requires learners to use the language to achieve a linguistic outcome; and as a result, it generates interaction data which is in dialogic form and interactionally authentic for research.

Divergent task: This is adopted from Duff's (1986) definition, which involves a range of possible responses and there is not a single correct answer. Divergent tasks also resemble discussion tasks.

Convergent task: This is also adopted from Duff's (1986) definition, which requires learners to converge on a single mutual correct answer. Convergent tasks resemble problem-solving tasks.

Language-related episode: Any part of dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others (Swain & Lapkin, 1998).

Unstructured group work: Naturally occurring group interaction which allows learners to develop informal roles as the talk unfolds among learners.

Structured group work: The group interaction in which teacher assigns some roles to learners.

Roles: Roles chosen for this study concern how the work will be done during peer interactions.

Chapter 2
Literature Review

This chapter will provide the theoretical underpinnings of this study and the relevant research. Firstly, there will be a summary of learning theories; namely, cognitive perspectives and social perspectives, to lay the ground for the current study. I will summarize cognitive psychology and its reflective theories in language learning. Following this, the role of interaction is viewed from cognitivist perspectives will be explained. Secondly, I will focus on the social perspectives and sociocultural theory in particular, which forms the theoretical framework of this study. I will also discuss the role of interaction from the sociocultural theory and related concepts such as scaffolding, mediation, and zone of proximal development (ZPD) which are closely related to the notion of collaboration or collaborative learning. Following this, I will focus on how interaction assists second language development in foreign language classrooms task-based language learning.

Finally, I will review the research of mediating variables in peer interaction which has been conducted in line with sociocultural theory.

Cognitive Psychology

Starting from the 1950s, there were major developments in the fields of linguistics and psychology. With the influence of linguist Noam Chomsky, there was a shift in focus from structural linguistics to generative linguistics, which emphasized creative nature of human language (Mitchell, Myles, & Marsden, 2013, p. 30). Brown (2007) summarises Chomsky's influence as such human language cannot be explained simply in terms of observable stimuli and responses. In a similar vein, cognitive psychologists claimed that meaning, understanding and knowing constitute significant data for study. Therefore, they preferred to uncover psychological principles of organization and functioning instead of looking at mechanical stimulus- response relations (Brown, 2007, p. 11). Both cognitive psychologists and generative linguists tried to look for underlying motivations and deeper structures of human behaviour by using a rational approach in which they employed the tools of logic, reason, and inference to come up with explanations for human behaviour. Therefore, it can be said that they were

interested in answering "why" type of questions that aim to understand the underlying reasons of a particular behaviour in a human being (Brown, 2007, p. 12).

Williams and Burden (1997, p.13) state that since cognitive psychologists are concerned with how human mind thinks and learns, they investigate mental processes to understand learning. According to cognitive psychology, learners have an active role in the learning process and they employ various mental strategies to understand the features of the language that they learn. Cognitive psychologists adopt two different approaches to study and explain cognitive aspects of learning such as information processing theories and constructivism (Williams & Burden, 1997). Information theorists are interested in explaining the brain's, which is seen as a complex computer, working system regarding rules and models of learning. On the other hand, constructivists are concerned with how people create their own sense of the world (Williams & Burden, 1997, p. 14).

Information processing. The first cognitive approach is information processing. Within the scope of this approach, cognitive psychologists investigate how people obtain information and process it (Williams & Burden, 1997, p. 15). Therefore, they investigate the factors such as attention, perception and memory. Cognitive psychologists claim by constructing models or constructs, the working of human mind can be understood, and therefore; the necessary effective mental processes for learning can be found (Williams & Burden, 1997). Additionally, where and how learning difficulties may occur can be identified by looking at learning difficulties.

Constructivism. In this part, there will a focus on cognitive constructivism on which Piaget has written extensively (Williams & Burden, 1997, p. 21). According to this approach, it is important that learners construct their own representations of reality (Brown, 2007, p. 12). Learners, in a way, make their own sense of experiences and of the world (Williams & Burden, 1997), and this gives them a more active role in their own learning. Therefore, it can be said that Piaget's theory is more action-based, which shows that focus is on the process of learning rather than what is learned (p.21). According to Piaget "learning is developmental process that involves change, self-generation, and construction, each building on prior learning experiences" (Kaufman, 2004, p. 304). He has

constructed a series of stages for cognitive development, starting from infancy to adolescent years.

This cognitive development involves a process of maturation in which genetics and experience interact (Williams & Burden, 1997, p. 22). This learning process is called as equilibration, which involves the process of balancing what is already known and with what is currently being learned. This process is managed by two complementary processes; namely as assimilation and accommodation. The process during which incoming information is changed or modified in the mind so that it can be fit into what is already known is called assimilation. Whereas, accommodation is the process during which the existing knowledge is modified to take into account the new information. These two processes contribute to cognitive adaptation, which is seen as essential aspect of learning (p.22). Although Piaget's theory is not directly related to learning, it provides implications for language teachers.

The role of interaction from cognitive perspectives. There was a cognitive-interactionist perspective on L2 learning, informed by the computational models of L2 acquisition during the 1980s and 1990s. According to this perspective, internal (cognitive) and external (environmental) factors interact (so 'interactionist') with each other, and this affects the observed processes and outcomes of L2 language learning. Ortega (2009, p.55) states that internal cognition is thought to be the locus of learning (hence cognitive) and environment provides learners with input, or linguistic data from other users of L2.

Stephen Krashen (1985) was the first person who formulated the best-known theory of learning named as Input Hypothesis. He provides that comprehensible input, which is both processed for meaning by learners and also contains something to be learned, provides the most important source of L2 learning and he rejected the role of output in L2 learning (Ellis, 2008, p. 247). However, his claims were then proven insufficient to explain second language learning by the following studies. For example, Ortega (2009, p.60) summarizes that children attending French immersion (Swain, 1985) and regular English-speaking schools showed little grammatical development although there were ample opportunities for comprehensible input. There are also other critiques of

Input hypothesis in showing the inadequacy of the hypothesis in explaining the L2 learning (Ellis, 2008, pp. 251-252).

Later, in the early 1980s, Michael Long proposed the Interaction Hypothesis claiming that much of the input in the linguistic environment, both naturalistic settings and communicative classrooms, originates in the interaction with interlocutors. Similar to Krashen, Long gave importance to comprehensible input (Ellis, 2008, p. 253). However, he focused on interaction and proposed that the best kind of comprehensible input that learners can obtain is the one that is interactionally modified (Ortega, 2009, p. 61), which is also named as interactive input (Ellis, 2008, p. 253). Interactional modifications such as clarification requests, confirmation checks, and comprehension checks are initiated in reaction to comprehension problems in order to negotiate meaning. These modifications have the potential to make the comprehension more individualized or learner-contingent. Ellis (2008, p. 253) also suggest that the interpersonal interaction where comprehension problems are negotiated *facilitates* (original emphasis) L2 acquisition. Interaction Hypothesis was later subject to some criticisms. For instance, Hawkins (1985) showed that learners often fake comprehension, in which they pretended to have understood as a result of negotiating a problem, in fact they did not (cited in Ellis, 2008, p. 254). Additionally, similar to Input Hypothesis, how comprehensible input resulted in acquisition could not be explained by Interaction Hypothesis either.

By the mid-1980s, it became apparent that input and interaction were not sufficient on their own to facilitate and guarantee successful acquisition. Learners engage in interaction not only for comprehension but also for making meaning and producing messages, which involves output. Therefore, as complementary to input hypothesis, Merrill Swain advanced the Comprehensible Output Hypothesis. Ellis (2008) summarizes that by a number of studies, Swain argued that comprehensible input alone was not sufficient to guarantee that learners succeeded in high levels of grammatical and sociolinguistic competence (p. 260) and she provided learner's limited opportunity to talk or lack of output in the classroom as a possible reason. Swain also provides that comprehension may not require the full process of forms, and it is possible to get the messages by some of the content words. On the other hand, production forces learners to focus on the

means of expression such as forms in order to successfully convey intended meaning (Ortega, 2009, p. 62). If learners push themselves to express their intended meaning when their interlocutors do not understand, the nature of what they are trying to do becomes more demanding, both cognitively and linguistically. There are both direct and indirect evidence for output in L2 acquisition.

The advocates of the aforementioned theories vary in their views about consciousness in L2 acquisition (Ellis, 2008, p. 265). While Krashen's input hypothesis definitely rejects the role of consciousness, there is a room for consciousness in Long's interaction hypothesis and Swain's Comprehensible output hypothesis. Drawing from the works of Long and Swain, Schmidt (1995) advocated the noticing hypothesis by claiming that this is an essential process during L2 acquisition. For him, the point of attention is where learner-internal and learner-external factors come together and development occurs within this attentional space.

Gass (1988) created a model of second language acquisition to show how input and interaction affect L2 acquisition by taking insights from the previously mentioned theories. There are five stages in the model to account for the conversion of input to output. The stages can be named in an order such as "apperceived input, comprehended input, intake, integration and output" (see Ellis, 2008, p. 267 for the explanation of each stage). This model incorporates aspects of hypotheses related to input and interaction, and Ellis (2008, p. 268) provides that it constitutes the clearest statements of the roles input and interaction play in L2 acquisition. This model can also be regarded as computational-type model, and is criticised by especially sociocultural theorists. Firth and Wagner (1997) also criticised the model, stating that it is individualistic and mechanistic and fails to account for the interactional and sociolinguistic dimensions of language.

In summary, the interactionist approaches draw on a heavily cognitivist tradition wherein the individual mind is seen as the sole locus of learning, which matter computational information processing. (van Compernolle, 2015). Therefore, interaction is conceptualized as an external trigger for internal acquisitional processes (p.4). Next section will provide the social perspective for language learning, emerged as a reaction to cognitive perspectives.

Social Perspectives

Beginning in the mid-1990s, many of second language acquisition (SLA) researchers felt dissatisfied with the input-output model of second language acquisition and opened new directions for SLA (Firth & Wagner, 1997). The notion of second language acquisition is reconceptualised and it is called as 'the social turn in SLA' (Block, 2003). There are two major criticisms of input-output model by sociocultural theorists in particular. The first thing that was criticized is the notion that acquisition is something that happens inside the head of learners. This view puts language learner as a "disengaged self … metaphysically independent of society" (Claude & Weaver, 1949, cited in Ellis, 2008, p. 271). In contrast, L2 learning is shaped by the social context in which it happens (Ortega, 2009, p. 217). The second point that was criticized is that 'interaction is just a provider of input' (Ellis, 2008, p. 271). Social SLA researchers object to this view since input and interaction models fails to characterize the rich nature of the interactions in which learners participate. Mondada and Pekarek Doehler (2004) also conceive social interaction as a social practice in which the learners co-construct linguistic and other competencies with other social agents in the emerging context (p. 502). Therefore, social SLA emphasizes the importance of collaboration between learners, sees learning as taking place in rather through social participation. Input is viewed as contextually constructed, and consists of both linguistic and non-linguistic features. Interaction, on the other hand, is seen as a socially negotiated event.

Social constructivism and sociocultural theory. Social constructivism emphasizes the importance of social interaction and cooperative learning to construct both cognitive and emotional images of reality. According to Spivey (1997, p. 24 cited in Brown, 2007, p. 13), constructivist research focuses on individuals engaged in social practises on a collaborative group, or on a global community.

One of the most popular social constructivist theories is the Russian psychologist Lev Vygotsky's cultural-historical psychology, more commonly known as sociocultural theory (SCT) in second language acquisition (van Compernolle, 2015, p. 1). The theory was originally advocated for understanding child language

acquisition. However, his ideas were taken by many applied linguists to study second language acquisition from the sociocultural perspective (Lantolf, 1995). As summarised by Williams and Burden (1997, p. 40), the importance of language including not only speech but also signs and symbols was emphasized by Vygotsky. Furthermore, through language, culture is transmitted and thinking develops and learning occurs.

Vygotsky (1978) viewed children's thinking and meaning-making is socially constructed and emerges out of their social interactions with their environment (Kaufman, 2004, p. 304), and according to Williams and Burden (1997, p. 39) learning occurs through social interaction with other people. The difference between Piaget's view of constructivism and Vygotsky's is that in the former individual cognitive development has been stressed; social interaction has been claimed to trigger development at the right moment. On the other hand, in the latter, social interaction is foundational in cognitive development and there are no pre-determined stages in development (p. 14).

The theory emphasizes that language and communicative interaction play a central role to mediate higher, specifically human psychological functions and their development. L2 development is not just seen as the acquisition of language for communication. It is, rather, about how cognition is mediated by language (L1, L2, etc.), including the development of L2 communicative abilities and also conceptual thinking, perceiving and representing things in the external world (Lantolf, 2011). It can be said that communicative interaction also mediates the development of concepts, conversational routines, cultural knowledge (van Compernolle, 2015, p. 13).

Researchers in sociocultural paradigm, therefore, take an in-depth perspective on the qualities of interactions between teachers-learners and among learners to explore the ways in which interaction mediates L2 development (van Compernolle, 2015, p.2). The theory also provides a nonreductive framework in which internal-psychological and external-social are brought together as a dialectical unity.

The role of interaction in sociocultural theory. As noted above, language and communicative interaction have a primary role in sociocultural

theory. van Compernolle (2015, p.6) states that the foundational tenet of SCT is that learning, such a higher psychological process, is mediated by culturally constructed artefacts. For Vygotsky (1986), language is an important mediational means. Communicative language allows people to mediate their thinking through speech (John-Steiner, 2007 as cited in van Compernolle, 2015, p. 12).

During communicative interaction, cognitive processes are externalized between people in speech. It involves both external-social and internal-psychological processes. It appears first in interpersonal interaction (between people), and then it is internalized to function intrapersonally (within a person) to mediate one's own thinking (van Compernolle, 2015). According to this perspective, communicative interaction is both the source and the result of the internalization processes (Lantolf & Thorne, 2006). Children or learners progress from object-regulation to other regulation and finally self-regulation through dialogic interaction (Ellis, 2008). Object-regulation means the actions of learners are determined by the objects in their environment. Other-regulation happens where they exhibit control over an object with the presence or assistance of a more competent person. Lastly, self-regulation happens where they become capable of independent strategic functioning (p. 271).

Sociocultural theory also has a psychological dimension to refer to the development of learners. This entails the extent to which an individual can perform the new skill. This is called what Vygotsky termed as zone of proximal development (ZPD) which will be further elaborated in the next section.

Zone of proximal development (ZPD). The construct of the zone of proximal development (ZPD) is an important facet of sociocultural theory. It is a metaphorical distance between the tasks what a child can accomplish alone and the ones she cannot do alone but could do with the assistance of more capable peers or adults. This informs what an individual's actual and potential levels of development. The skills that the individual has already mastered constitute the person's actual level. On the other hand, the skills that the individual can accomplish when assisted or supported by another person, or more capable person, constitute the potential level. For interaction to be beneficial for acquisition, it needs to assist the learner to construct zones of proximal development, which is achieved with the help of scaffolding (Ellis, 2008, p. 271).

ZPD allows understanding a few key factors about learning. Ellis (2003, p. 180) summarises these as such, for example, ZPD accounts for why learners fail to perform some structures even if mediation is provided because learners cannot construct the ZPDs to help them perform such structures. In addition, it helps to understand why learners can perform some structures with the help of social assistance but not independently since by constructing ZPDs, learners can perform these even though they have not internalised them. Lastly, the internalisation of new structures is managed through the appropriation of these structures in the already created ZPDs by the learners.

Scaffolding. The notion of scaffolding is a social construct which is closely linked to ZPD. According to the perspective of SCT, L2 acquisition is not merely individual-based process but rather it is shared between the individual and other people. One of the ways in which this sharing takes place is scaffolding. Scaffolding is an inter-psychological or dialogic process and with the help of it, learners internalize knowledge (Ellis, 2008). That means a speaker (expert or novice) assists another speaker (a novice) to perform a task or a skill that they are unable to perform independently.

Scaffolding originally referred to a form of adult assistance (Gonulal & Loewen, 2018) and the following features of this kind of help were identified as follows:

1. Recruiting interest in the task
2. Simplifying the task
3. Maintaining pursuit of the goal
4. Marking critical features and discrepancies between what has been produced and the ideal solution
5. Controlling frustration during problem solving
6. Demonstrating an idealised version of the act to be performed (Wood, Bruner, & Ross, 1976, p. 98)

Thus, it can be understood that scaffolding involves both attending to cognitive demands of a task and affective states of a person working on the task (Ellis, 2003, p. 181). Scaffolding can be identified as one feature of contingency of

a dialogic process. According to van Lier (1992), contingency refers to how one utterance is connected to another to produce coherence in discourse. It is achieved when the rationale behind the utterance is apparent to the interlocutors and the expectations it sets up are met (Ellis, 2003, p. 182). van Lier also discusses that contingency helps transform social processing into cognitive processing drawing on sociocultural theory. Ellis (2003, p. 182) also argues that contingency provides a condition for learning through social interaction and scaffolding has a principal role of achieving it with low-proficiency learners.

Gonulal and Loewen (2018) summarise that the term scaffolding has been extended to teacher-student interactions starting from the late 1970s. This kind of scaffolding refers to the interventions employed by teachers in their learners' ZPD to facilitate learning (p.2). Until the 1990s, this type where there is an expert helping a novice learner got the L2 researchers' interest. However, later, it was understood that there does not have to be necessarily an expert who can provide scaffolding, learners themselves can provide each other with the help they need. Donato (1994), for example, coined the term 'collective scaffolding' to refer to the scaffolding learners provide to each other. In this case, there is not a definite expert, but rather the role of the expert is bilateral (Gonulal & Loewen, 2018). In this kind of scaffolding, learners can build up ZPDs for each other and be more successful compared to what they would achieve on their own.

Ellis (2008, p. 527) states that the term scaffolding has been replaced by new terms such as 'collaborative dialogue' and 'instructional conversation' in recent studies due to its being reified into an object and its nature that makes it difficult to apply in peer-peer interactions. Ellis (2003, p. 182) summarises by drawing on Lantolf's ideas that dialogic mediation should be seen as an activity which is jointly created by the participants rather than it is something that one of the participants brings to the conversation. Collaborative dialogue (Swain, 2000) is defined as "dialogue in which speakers are engaged in problem solving and knowledge building" (p. 102). Learners' using the L2 to jointly address a problem and paying conscious attention to language forms that arise in the utterances they produce lead to knowledge building. Instructional conversation (Tharp & Gallimore 1988, cited in Donato, 2000) is defined as pedagogic interaction which is directed at a curricular goal. It is teacher-led and conversational in nature.

Learning a Second Language through Interaction in EFL Classrooms

This study is based on the premise that learning is a social process which is embodied in interaction. Learning is also defined as a change in socially-displayed cognitive state. In order to understand socially-distributed cognition, we must look closely at the interplay language, interaction and learning; and Seedhouse and Walsh (2010) state that classroom interaction must be studied first to understand learning (p. 127). In classrooms, through their interactions, interactants display and orient to learning, and they exhibit different abilities during the course of jointly creating discourse which is conducive to learning.

In L2 classrooms, students' knowledge is shaped by the ways in which students interact via distinct and recurrent discourse patterns and by other interactional meaning-making system, such as gestures (Thoms, 2012). This knowledge is co-constructed with other people, teachers or learners, via interaction. Therefore, interaction among participants is seen as a fundamental aspect of language learning. However, in foreign language contexts, learners have limited or no access to native speaker models for their linguistic development and to actual samples from everyday social interaction (García Mayo & Pica, 2000, p. 273). It is not also uncommon that learners do not have opportunities to produce the target language inside or outside of the classroom (Sato, 2013). These facts obviously emphasize the importance of language classes in which learners could engage in meaningful interaction by receiving the necessary input and producing spontaneous speech (Sato & Ballinger, 2016, p. 8). However, Ellis (2008, p. 302) defines language classroom as "a setting where the target language is taught as a subject only and is not commonly used as a medium of communication outside the classroom". This also implies the limited opportunities that language classrooms offer for learners. Moreover, the dominance of teacher talk in foreign language classrooms can be observed due to some pedagogical reasons (see Sato & Ballinger, 2016, p. 8) and Harmer (2001) points out that teacher-learner interaction in a classroom setting allocates each learner very little time to actually speak. In order to overcome these obstacles, Sato and Ballinger (2016) suggest to use peer interaction activities as an ecological and effective tool since they create opportunities for everyone to speak and participate (p. 8) and talking time for any student is dramatically expanded in peer interactions (Harmer, 2001).

Ellis (2012) points out that there are longitudinal studies which show that how learner participation and L2 learning take place in classroom context. He further comments that in order to encourage learner participation in the classroom, one of the most common ways is to use small group work (p. 13). Ellis (2003) maintains that the study of group work is intertwined with research that has examined 'tasks' since most of the studies have investigated how learners perform different types of tasks either in pairs or small groups. Moreover, he claims that task-based language teaching (TBLT) is a good option for foreign language contexts (Ellis, 2009). This is due to the fact that TBLT allows learners to communicate in L2 in the classroom, which is lacking outside of the classroom. As the focus of this study, there will be a focus on 'tasks' used as a data elicitation tool. Following this, there will be a section for peer interaction and its relation to L2 learning.

Task-based language teaching and second language learning. Task-based Language Teaching (TBLT) is explained as one of the off-springs of Communicative Language Teaching (CLT) (Littlewood, 2014) and it helps language learners to develop their second language proficiency. Through engaging in tasks, L2 learners have the opportunity to develop L2 proficiency in order to communicate fluently and appropriately. Therefore, tasks have an utmost importance in second language learning, and there has been a growing importance attached to employing tasks in language classrooms. There has also been a growing interest in researching pedagogic tasks since the early 1980s (Ellis, 2012, p. 14).

These two paradigms have led to different interpretations of tasks by language teachers and second language acquisition (SLA) researchers for their own purposes (Bygate, Skehan, & Swain, 2001). Within the first paradigm, it was suggested that requiring learners to express meanings would be an effective principle to motivate second language learning. Activities such as information gap or jigsaw were used as methods to promote interaction for learners in a natural way. Later, these activities were described as 'tasks' and there were attempts to develop principles and methodologies by which such tasks could be used effectively (p. 3).

There was, however, a contrastive view on tasks from SLA researchers. Bygate et al. (2001, p. 3) mention that as SLA researchers began to focus on causative influences of interaction and output on second language development, they viewed interaction that promoted negotiation for meaning as an ideal circumstance for SLA to proceed. Therefore, SLA researchers started to use the concept of tasks to account for the manner in which negotiation of meaning was provoked more or less, and published works on the possible relationship between different task features and performances during which there was more or less negotiation of meaning. This takes us to the distinction of tasks termed by Long (1990) such as 'closed' and 'open' tasks. While closed tasks require agreement on the outcome; no required agreement is necessary to perform open tasks. Although these two different approaches put the tasks into centre, they use this term to address different problems (Bygate et al., 2001). The first paradigm, named as pedagogic approach, takes its starting point from the problem of how to make the behaviour of the teacher more effective, and how learners can interact with tasks more effectively. The research approach, on the other hand, starts with the problem of how tasks can be used as a device to unveil acquisitional processes. Tasks, therefore, enable fundamental issues to be studied more effectively (p. 4).

According to Bygate et al. (2001), tasks-as-research generate data that is of interest to the researcher. This interest may arise from two different sources: one is from theory such as the role of negotiation of meaning in promoting change in interlanguage and the other is from pedagogy such as the usefulness of different task types in achieving certain pedagogical goals (p.6). From the task-as-research perspective on learning, we see that research draws upon theories of second language development to formulate relevant questions for task-generated data. These questions, for example, may propose how particular interaction and task types or conditions might be more supportive of interlanguage change, or how interlanguage change might be consolidated. It is important for researchers to come up with research methodologies which can help address internal processes through external evidence (p. 7). For learners, research questions such as the acceptability of tasks to learners, the effect of different task types on extending and involving learner performances, or learner motivation (p. 8). Bygate et al. (2001) further emphasize that in terms of learning and learners, there is a

tendency for a detailed analysis with careful examinations of task performance to provide specific evidence of learning processes.

As it is stated above that there are different approaches from language teachers and SLA researchers, there are also different definitions of tasks throughout the history of TBLT. In the next section, the definitions of tasks will be given in a chronological order without making a distinction between two paradigms.

Definition of tasks. According to Ellis (2003), tasks are viewed as devices for generating interaction involving L2 learners (p. 69). He later states that a task is a language-teaching activity in which meaning is primary and there is some kind of gap (Ellis, 2008, p. 981). Learners are required to fill in these gaps by using their own linguistic resources. Although there are many different definitions of tasks, most of them share one aspect in common, that is tasks involve communicative language use where the focus is on meaning rather than linguistic structure. Below there are some definitions of tasks collected by Bygate et al. (2001), Ellis (2003) and Nunan (2004). The first definition of tasks has been provided by Long (1985) as follows:

> a piece of work undertaken for oneself or for others, freely or for some reward. Thus examples of tasks include painting a fence, dressing a child, filling out a form, buying a pair of shoes, making an airline reservation, borrowing a library book, taking a driving test, typing a letter, weighing a patient, sorting letters, making a hotel reservation, writing a cheque, finding a street destination and helping someone across a road. In other words, by 'task' is meant the hundred and one things people do in everyday life, at work, at play and in between. (p. 89)

According to Long's definition, tasks must be real-world tasks. It is also implied that learners do not necessarily come up with a linguistic outcome at the end, and they do not need to use language to perform the tasks. Therefore, it is quite obvious that Long's definition of a task is more of a non-linguistic one and tasks can consist of both oral and written activities. Crookes (1986, cited in Bygate et al., 2001, p.9) later defined tasks that combine both pedagogical and research aspects as it is "a piece of work or an activity, usually with a specified objective,

undertaken as part of an educational course, at work, or used to elicit data for research".

Richards, Platt and Weber's (1986) definition of tasks seems more pedagogical in nature similar to the previous one. The authors have defined the tasks in terms of what the learners will do in class rather than outside of the classroom. The way of how the authors define a task is consists of:

> an activity or action which is carried out as the result of processing or understanding language (i.e. as a response). For example, drawing a map while listening to a tape, listening to an instruction and performing a command may be referred to as tasks. Tasks may or may not involve the production of language. A task usually requires the teacher to specify what will be regarded as successful completion of the task. The use of a variety of different kinds of tasks in language teaching is said to make language teaching more communicative . . . since it provides a purpose for a classroom activity which goes beyond the practice of language for its own sake. (p. 289)

Although Richards et al.'s definition is pedagogical, similar to Long's definition of tasks, they also emphasize the importance of a non-linguistic outcome. Prabhu (1987) defines tasks from the perspective of pedagogy and different from Long and Richards et al.'s definitions, there is an emphasis on the linguistic outcome at the end. For him, a task is "an activity which required learners to arrive at an outcome from given information through some process of thought and which allowed teachers to control and regulate that process".

Another pedagogical definition is made by Breen (1987, p. 23) as "any structured language learning endeavour which has a particular objective, appropriate content, a specified working procedure, and a range of outcomes for those who undertake the task". In this definition, tasks are referred to work-plans which simply have the purpose of facilitating language learning. In addition, a brief practice exercise or a complex workplan or lengthy activities can be regarded as tasks.

Nunan (1989) defines the task as "a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target

language while their attention is principally focused on meaning rather than form". Also, the tasks should stand alone as a communicative act in its own respect with a beginning, a middle and an end, which gives a sense of completeness as a whole. Nunan (2004), then, divided the 'tasks' as real-world or target and pedagogical tasks. For him, target tasks refer to uses of language in the world beyond the classroom; on the other hand, pedagogical tasks are the ones that occur in the classroom (p.1).

Skehan (1998) puts forward five key characteristics of a task which tries to combine most of the characteristics provided in other definitions. In his definition, he refers to meaning's being primary and there is a correspondence to real-world activities. In his definition, task completion has a priority and outcomes are used to assess the tasks. In Skehan's definition, there is not an emphasis for the use of real-world tasks. For instance, 'deciding where to locate buildings on a map' can be taken as a task, and this type of tasks rarely occur outside of the classroom. However, these tasks have some sort of relationship to the real world (Ellis, 2003, p.6) because the kind of language behaviour they elicit corresponds to the communicative behaviour arising from performing real-world tasks. In addition, it is assumed that the tasks are performed orally, and so they are directed at oral skills.

Compared to other definitions, Willis and Willis (2001) narrowed the scope of a pedagogical task to the classroom since the previous definitions grant anything the learners do in the classroom as a task. They define the task as "a classroom undertaking … where the target language is used by the learner for a communicative purpose (goal) in order to achieve an outcome". In this definition, it is seen that tasks bring about an outcome through the exchange of meanings.

Additionally, Ellis (2003) defines a task as "a workplan that requires learners to process language pragmatically in order to achieve an outcome". According to his definition, learners need to give primary attention to meaning, and also they need to make use of their own linguistic resources.

The definitions of tasks provided previously seem similar, but also interestingly different from each other. Bygate et al. (2001) provide an explanation for this by stating that definitions of tasks need to be different for the different purposes to which tasks are used. Tasks-as-research are not directly connected to

pedagogy, but used to gain a better understanding of pedagogy. Researchers may use tasks as a vehicle to investigate such issues which have either indirect relationship or no connection at all to pedagogy. The definition of task-as-research may be what Bygate et al. (2001) provide:

> A task is a focused, well-defined activity, relatable to learner choice or to learning processes, which requires learners to use language, with emphasis on meaning, to attain an objective, and which elicits data which may be the basis for research. (p.11)

Later, Samuda and Bygate's (2008) provided the core concepts used by researchers of tasks as:

> A task is a holistic activity which engages language use in order to achieve some non-linguistic outcome while meeting a linguistic challenge, with the overall aim of promoting language learning, through process or product or both. (p.69)

All of the definitions above were drawn from both what Bygate et al. (2001) distinguished as task-as-research and task-as-pedagogy perspectives. Ellis (2003, p.2) provides six dimensions upon which these different definitions can be addressed. They can be summarised as involving "scope of a task, the perspective, authenticity of a task, linguistic skills to perform a task, psychological processes involved in performance and outcome of a task". Based upon the definitions in the literature, I came up with my own definition of a task based upon the six dimensions proposed by Ellis (2003).

> A task is a meaning-focused activity which requires learners to use the language to achieve a linguistic outcome and as a result of performing it, it generates interaction data which is in dialogic form and interactionally authentic for research.

Based upon this definition, tasks were either designed or chosen to elicit interaction data which is authentic (more information is provided in Methodology part). Having provided the distinction between tasks-as-pedagogy and tasks-as-research paradigms and definitions of tasks based upon six dimensions proposed by Ellis (2003), the next section will provide the types of tasks.

Types of tasks. Nunan (2004) mentions that there are many definitions and types of tasks as the number of people who have written on task-based language teaching. Each of them has their own definitions and categorizations. Some of them will be provided below based on Nunan's (2004, pp. 56-59) summary.

Prabhu (1987) distinguished three types of tasks, e.g. information-gap, reasoning-gap and opinion-gap. Information gap activities involve transferring of given information from someone to another. On the other hand, reasoning-gap activities requires inducing new information from given information by applying processes such as inference and deduction. In opinion-gap activities, however, a personal preference or attitude is identified in response to given situation.

Pica, Kanagy, and Falodun (1993) proposed five different pedagogical tasks such as jigsaw, information-gap, problem-solving, decision-making, and opinion exchange tasks. Jigsaw tasks involve distributing different pieces of information to learners and then asking them to combine these pieces to form a whole. Similar to Prabhu's definition, in information-gap tasks, one part is provided some information while the other part holds complementary information. They need to find out the other party's information to complete the activity through negotiation. Problem-solving tasks involve assigning a problem and a set of information to learners to find only one solution to this problem. During decision-making tasks, learners are given a problem and a possible set of outcomes for the problem. Through negotiation and discussion, they try to choose one. Lastly, opinion exchange tasks involve engaging in exchange of ideas. There is not a required agreement in the end.

Duff (1986, p. 5) provided two types of tasks e.g. convergent and divergent tasks. Convergent tasks are coined from problem-solving tasks and they are defined as tasks in which learners are required to converge on a single mutual correct answer (Tan Bee, 2003, p. 54). On the other hand, divergent tasks resemble discussion tasks. These tasks encourage a range of possible responses and there is not a single correct answer in contrast to convergent tasks. Tan Bee (2003) also suggests that debates and opinion-exchange tasks may resemble divergent tasks.

Long (1990) proposed a distinction between tasks, i.e. open and closed tasks by referring to Duff (1986). For him, an open task is the one which does not necessarily involve a predetermined correct solution, but rather there are a number of different acceptable solutions (p. 45). On the other hand, a closed task requires learners to reach a single outcome, previously determined by the researcher. He argues that closed tasks may elicit more incorporation from the learners than open tasks. Ellis (2003, p. 89) states that opinion-gap tasks are mostly open in nature and these may involve making choices, debates and general discussions. He also suggests that information-gap tasks are typically closed in nature (2003, p. 89).

Sociocultural SLA and tasks. Interactionist and cognitive theories of language state that tasks lead to interactions which are predictable on the basis of the design features of the tasks (Ellis, 2008, p. 822). For example, Pica and Doughty (1985a, 1985b) found that required exchange of information led to more negotiation compared to optional exchange of information. Foster (1998) also compared required and optional exchange of information tasks and found similar results. There was more negotiation in required exchange tasks than optional tasks. Pica and Doughty concluded that task type was a more determining factor in the amount of negotiation of meaning produced either in teacher-fronted classrooms or in group-work. Moreover, Ellis (2003) summarises that task design variables can have an impact on language production.

On the other hand, sociocultural theory emphasizes that the activity deriving from a task is unstable, and it changes according to the specific goals and motives of the participants (Ellis, 2008, p.822). This means that there is not a correspondence between task-as-workplan and task-in-process (Seedhouse, 2005). Seedhouse defines task-as-workplan as the intended pedagogy, the plan prior to classroom implementation of what participants will do as a teacher and learners. On the other hand, task-in-process is the actual pedagogy or what actually happens in the classroom. Seedhouse (2005) suggests that empirical data be gathered from task-in-process, and this actually requires a detailed investigation. This is because the interaction resulting from a task is dynamic and locally managed. For example, Hellermann and Pekarek Doehler (2010) explored how teacher-designed language-learning task interactions could vary in their

performance. The researchers used three directions-giving tasks. The results showed that participants' individual and group orientations to the similar tasks led to different co-constructed performances of the task and unique potentials for learning in each one. Therefore, the investigation of tasks should not be based upon the quantification of a priori variables as interactionist and cognitivist researchers have done, but rather there should be a close examination, i.e. emic, of emerging interaction (Ellis, 2008, p. 823) as suggested by conversation analysis.

The investigation of tasks from a sociocultural perspective requires also a close examination of the interactions emerging from tasks. Ellis (2003, p. 184) states that sociocultural theory warns researchers not to treat tasks as blueprints for interaction but rather as tools that are used to construct an activity by learners. The kind of methodology of investigating tasks should be qualitative micro-analysis of interactions. This forms the rationale behind the methodology of this study, explained in Chapter 3.

Peer Interaction and Second Language Learning

Although the interaction between second language (L2) learners has been investigated since the early 1980s, there is still less attention to this research domain when compared to other types of interaction (Sato & Ballinger, 2016, p.1). Peer interaction is described as "any communicative activity carried out between learners, where there is minimal or no participation from the teacher" (Philp, Adams & Iwashita, 2014, p.3). It also includes a context in which all the participants are language learners, and they are together for the purpose of learning. Philp et al. (2014) also state that this context is of a kaleidoscope in that it changes with the shifting combinations of those involved, how they relate to one another, the activity in which they are engaged, their purposes and means, and so on (p.1). Philp and Tognini (2009) define the purposes of peer interaction as "1) interaction as practice, including the use of formulaic language; 2) interaction that concentrates on the exchange of information; and 3) collaborative dialogue including attention to form' (p. 254).

Sato and Ballinger (2016) inform that peer interaction can be used in a variety of forms (from pairs to small groups and to larger groups). Any type of task

can be adapted for peer interaction, and those tasks can be assigned in any learning environment (in the classroom, outside the classroom for a project or in a virtual environment etc.). Peer interaction is useful in second language classes, in content-based classrooms, as well as in foreign language classrooms for tasks designed to promote L2 production (p.7).

Peer interaction is different from teacher-learner interaction, and it allows for different types of language use and practice (Philp et al., 2014, p. 2), and provides a context facilitative of learning in which learners experience greater levels of comfort (Sato & Ballinger, 2016, p. 6). Therefore, it is usually regarded as being less stressful than teacher-led interaction, mostly because there is not a careful monitor of ongoing interaction (Philp et al., 2014). According to Sato and Ballinger (2016, p. 5), this comfort positively affects learners' L2 processing since it can help them notice and point out errors in their partners' speech and encourage them to modify their own errors when given feedback. Compared to teacher-learner interactions, learners have more talking time and more opportunity to engage in meaningful conversation in peer interactions. Unlike teacher-fronted activities in which there is an expert, the roles of learners in group works are always changing as they contribute to the interaction. Blum-Kulka and Snow (2004, p. 291) describe peer talk as having a "collaborative, multiparty, symmetrical participation structure". Since participants work together toward a common goal, it is collaborative, and it is multiparty for there are at least two or more participants. Lastly, it is symmetrical since all the learners are equal in interaction in terms of participant contributions (Philp, 2016, p.378). The nature of peer interaction as a context for learning is shaped by different dimensions such as:

- The emphasis of language use in the interaction (e.g., experimental, corrective, or fluency based);
- The participants within the group (e.g., their social relations, age, experience, and proficiency);
- The medium and mode of instruction (oral or written, face-to-face, or online);
- The task (purpose, specification, and content) (Philp et al. 2014, p.11)

Tognini, Philp and Oliver (2010, p. 5) state that peer interaction can offer different types of learning opportunities in the way the L2 is used, and, potentially,

complementary benefits for language learning. Therefore, investigating peer interaction provides a richer view of L2 development, showing what learners are able to do with language and how language development occurs in turn by turn interaction. However, there are a few empirical studies that have shown a link between engagement in conversational tasks with a peer and L2 learning (Adams, 2007). Previous studies on learner-learner interaction have been mostly conducted in accordance with input-output model of second language acquisition, e.g. Long's interactionist perspective which analyses interaction focusing on negotiation for meaning, modified output, negative and also positive feedback (Fernandez Dobao, 2014b). In these studies, language was viewed as separate from its social context, and the data were gained by using experimental tasks (Ohta, 1995). However, as Ohta (1995) puts forward L2 learner-learner interaction is a place for collaborative construction of and engagement in activities between novice and expert, except from being only a place for negotiation of meaning. Moreover, Mercer (1995, p. 97) stated the collaboration and interaction were not being evaluated in terms of process, but outcome as cognitivist and interactionist perspectives have conducted the studies. Therefore, there is the need to look for the collaborative nature of peer interaction as a process with more detailed analysis.

Although cognitive and social approaches view L2 development differently, look for different outcomes and employ different methodologies, both paradigms provide studies that can inform and benefit the understanding of peer interaction and how this kind of interaction can be employed in foreign language classrooms. The theories can be summarized under three sections which will be provided as follows:

Cognitive perspectives. There has been a dominance of cognitive perspectives as well as interactionist framework in investigating peer interaction (see Garcia Mayo & Alcon Soler, 2013, for a review). These studies date back to the 1970s and to Long's (1983 as cited in Sato & Ballinger, 2016, p. 9) interaction hypothesis. The idea of the interaction hypothesis is when an L2 learner interacts with a native speaker, they need to use conversational moves labelled as negotiation for meaning in the event of communication problems. The native speaker in turn will modify the utterance to make it comprehensible to the non-native speaker. This comprehensible input (Krashen, 1982) along with modified

interaction is believed to promote second language interaction. Later, Long (1996, 2016) revised the interaction hypothesis by emphasizing the role of feedback – positive or negative- in promoting L2 acquisition.

Following this, researchers have started to focus on corrective feedback (Lyster, Saito, & Sato, 2013) as the most important interactional move since it allows noticing (Schmidt, 1990). Schmidt argues that when learners notice the gap between what they produce and input in the environment, the noticed input becomes intake which is necessary for L2 learning. Corrective feedback is important in that it allows L2 learners to shift their attention to formal aspects of language while they are still working on meaning; to produce meaningful output (Swain, 1985); to avoid entrenching wrong knowledge representation (Lyster & Sato, 2013). Sato and Lyster (2007) found that Japanese learners of English provided quantitatively more feedback and also more effective type of feedback than native speakers. Also, Sato and Lyster (2012) argue that during peer interaction, both feedback provider and feedback receiver benefit from developing more automatic use of the target language, which is proceduralisation.

Sociocultural perspectives. Research based on sociocultural perspectives investigates how learners assist each other through scaffolding and building knowledge together (Philp et al., 2014, p.25). This process helps learners to perform at a level beyond their individual ability, developing knowledge and use. On the other hand, an interactionist view, developed from cognitive perspectives, focuses on linguistic data that learners receive from their interlocutors during interaction. The emphasis especially is on individual acquisition, based on all the different types of language input received through interaction with others. According to sociocultural researchers, cognitive theories can explain only a partial picture of language acquisition (Sato & Ballinger, 2016, p. 11).

Foster and Ohta (2005, p. 403) argued that knowledge is not owned only by the learner, but it is rather a property of social settings. Similarly, cognition and knowledge are also social and dialogically constructed (Lantolf, 2012). When learners from the same level collaborate, they pool their individual knowledge and resources with each other. As a result, they are mostly able to solve each other's problems and co-construct new language knowledge (Antón & DiCamilla, 1998; Donato, 1994; Ohta, 2000, 2001; Swain, 2000; Swain & Lapkin, 1998).

Sociocultural researchers also suggest that co-construction of knowledge (or scaffolding) emphasizes collaboration (Sato & Viveros, 2016, p. 92). The terms such as zone of proximal development (ZPD) and scaffolding are central to the sociocultural theory. Aljaafreh and Lantolf (1994) define ZPD as the framework which brings everything together. Scaffolding is defined as the support or the guidance and sociocultural researchers have used this term to explain peer interaction (Donato, 1994; Ohta, 2001; Swain & Lapkin, 1988, 2001, 2002). When peers work together, they can act both novices and experts, and therefore, they provide scaffolded assistance to each other (Donato, 1994; Ohta, 2001) because neither of them shares the same weaknesses and strengths with the other one (Fernández Dobao, 2016, p. 34).

Donato (1994) proposed the term of collective scaffolding arguing that scaffolding is not necessarily unidirectional, from expert to novice, but bidirectional in collaborative peer interaction. He also showed that internalisation was takin place while learners were providing scaffolding to each other. Peers can support each other by "questioning, proposing possible solutions, disagreeing, repeating, and managing activities and behaviors" within the ZPD (Swain, Brooks, & Tocalli-Beller, 2002, p. 173). Scaffolding is also associated with assistance which is a feature of learner talk that is claimed to promote L2 development (Foster & Ohta, 2005, p. 413). Storch (2002) in her oft-cited paper, conceptualized scaffolding and co-construction of knowledge into four relationship patterns (collaborative, expert/novice, dominant/dominant, dominant/passive) in pair-pair interactions under two dimensions; namely, equality and mutuality. She found out that collaborative and expert/novice patterns were more conducive to L2 learning.

From the point of sociocultural perspective, interaction has been analysed as an opportunity for learners to scaffold each other and to collaborate in the solution of their language-related problems. Swain and Lapkin (1998, p. 89) refer to "any part of dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others" as language-related episode (LRE), what Swain (2006, p. 98) refers as "languaging". Through the use of LREs which are seen as the sources of learning, learners build new knowledge by using language to think and talk about language (Fernández Dobao, 2016, p. 34). There are a number of studies that examined peer interaction

using LREs as a measurement of its effectiveness (Storch & Aldosari, 2013) and evidence varying degrees of collaboration by identifying and analysing LREs (Storch, 2011) (more empirical studies on LREs will be provided in the next section).

Jackson (2001) states that LREs have been used to investigate discourse in classroom studies, especially to investigate collaborative learning and task-based language teaching. He claims that research into LREs can provide fine-grained analyses of learner productions. For example, LREs, as a research tool, can help understand the nature of second language production and also explore the contributions that output makes in learning a second language. LREs can be subcategorised as meaning-based or form-based based upon the nature of the discourse. The following categorisation has been taken from Garcia Mayo and Azkarai's (2016, p. 249) categorisation, which has been also used in other studies Ross-Feldman (2007) and Storch (2008).

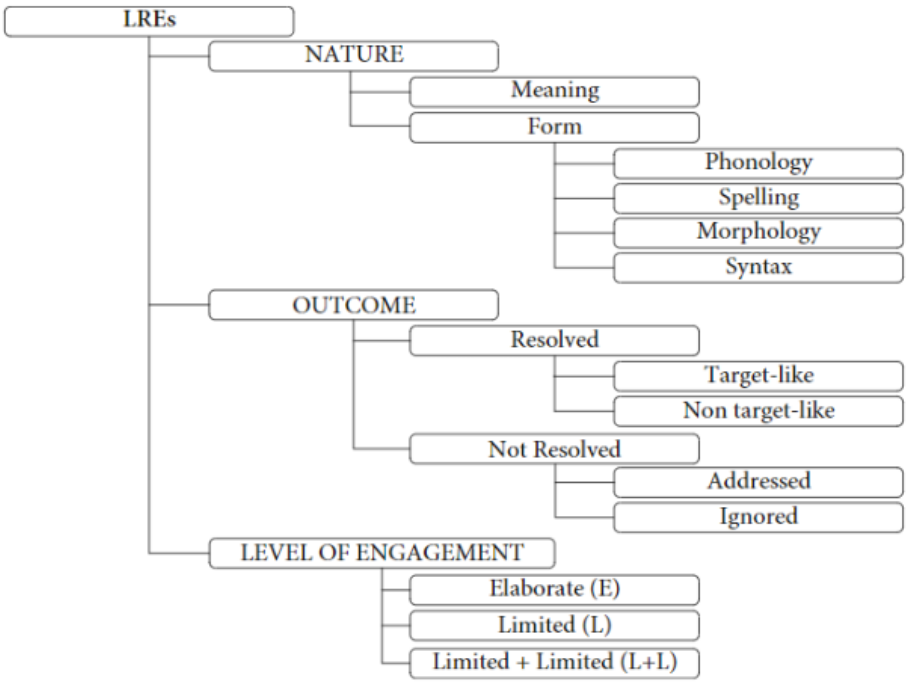

Figure 1. Categorisation of language-related episodes (excerpted from Garcia Mayo & Azkarai, 2016, p. 249)

Mediating variables in peer interaction. Peer interaction activities can be affected by internal and external factors that mediate the ultimate effect on learning. Sato and Ballinger (2016, p. 14) provide five variables that are essential

to investigate in peer interaction. These can be given as "the impact of task type, mode of interaction, proficiency level, learner relationships, and pedagogical intervention on learners' interactional behaviours and language production." Since the aim of this study is to investigate the effects of task types on the interaction, there will be a special focus on studies that investigate different tasks in peer interaction.

Task type has attracted researchers a lot, partly due to the popularity of task-based language teaching research on peer interaction (Skehan, 2014). The researchers have focused on the interactional modifications like negotiation of meaning, in other words, the outcomes of this kind of interaction, in different types of tasks. There is a substantial body of research suggesting that the learning outcome of peer interaction tasks may be related to the nature of the task (Philp et al., 2014, p.125).

Different types of tasks lead to differences in language production (Philp et al. 2014, p.128). Pica, Kanagy, and Falodun (1993) studied the impact on task type on interaction patterns by using jigsaw, information gap, problem-solving, decision-making, and opinion exchange activities. They found that jigsaw and information gap activities provoke the most beneficial interaction patterns because the first type requires learners to converge on a single outcome after sharing what they have in hand; and the second one requires one learner to elicit information from other learner who holds the information.

Fotos (1994) found that more negotiation was triggered in a task which involved split information and required a closed outcome. Duff (1986) found that convergent tasks promoted more interactional modifications than divergent outcome tasks. Gass, Mackey, and Ross-Feldman (2005) examined the incidence of negotiation of meaning, language-related episodes (LREs), and recasts in three different tasks, two of which required information exchange between participants and one in which information exchange was optional. The tasks were completed both in classroom and laboratory setting to see the role of setting on interactional modifications. The findings show that there is more focus on form occurred in the required information exchange tasks. Dörnyei and Murphey (2003) also state that collaboration can be promoted by using certain tasks in which students work towards a common goal and a single group product (p. 22). The effectiveness of

jigsaw and information gap activities over other activities have been found in computer-mediated communication (CMC) settings as well (Yilmaz, 2011).

Sato and Ballinger (2016, p. 15) provide that learners interacting with peers, they use their body language, complete the task by using simple acknowledgements such as “yes/no”, avoid using the targeted linguistic structures because it is common that “successful completion of the task does not require the form”. Therefore, task types are an important mediating variable for peer interaction and there is a necessity of further research investigating not only interactional moves but also task effects on L2 learning outcomes. For this research to be of use and helpful for language teachers in classrooms, Philp et al. (2014) state that there is a need to go beyond classifications of tasks to consideration of how different tasks take particular forms in actual classrooms and how task effects on language production are mediated by other variables such as context, setting, and participant.

Philp, Walter, and Basturkmen (2010) carried out a qualitative analysis of task-based interactions and post-task interviews to describe the relation of personal and contextual factors that support learner engagement in focus on form in peer interactions. Their study contributes to the task-based interaction since it shows the effects of task-based engagement on language production and learning cannot only attributed to cognition but also to the social unit of learners engaged in the tasks. For task models to capture these effects, both individual variables and group dynamics need to be included in peer interaction tasks (Philp et al., 2014).

Group dynamics in peer interaction. Philp and Tognini (2009) state one role of peer interaction is to provide an opportunity to experiment with language form and use, through communicating and collaborating with other learners. However, Storch (2002) found that not all learners in pairs do work collaboratively when assigned to work on language tasks. Philp et al. (2014, p. 48) explain that learners intentionally avoid negotiation of meaning and do not indicate nonunderstanding in order to save face. They rather guess what others are trying to say by referring to shared L1 and common context.

Other studies also show that learners avoid providing corrective feedback to peers due to the reasons such as perceived inappropriateness, low proficiency,

face-saving, and the desire to focus on communication rather than grammatical accuracy. These all prove that collaboration between peers may be strongly associated with personality combinations, perceptions of self and other, past histories, and experiences (Kim & McDonough, 2008; Storch, 2002; Watanabe & Swain, 2008).

Philp et al. (2014, p. 137) inform how teachers can shape the classroom experience to help learners engage in tasks through strategic grouping of participants (Storch, 2002), assigning task roles according to proficiency task roles (Yule & Macdonald, 1990), prior instruction or modelling of interactional strategies (Kim & McDonough, 2011), post-task feedback (Gibbons, 2003), and prior training in interpersonal skills (Dörnyei & Murphey, 2003). The social dynamics of peers in groups or pair interactions greatly affect learners' ability to profit from each other (Sato & Ballinger, 2016, p. 19). Dörnyei and Malderez (1997) use the term group dynamics as "the scientific analysis of the behaviour of small groups". There are some key issues related to the group dynamics: group composition, norms, roles and interaction patterns, group cohesion and climate, group formation and development, etc. Group dynamics involve the description and analysis of central features of groups and how these affect group life, and group structure is seen as the most important feature of group characteristics. The structure of a group involves the patterns of relationships emerging among the participants. There are some key concepts of the group structure such as the norm and status system, group roles, group cohesion, and classroom goal structures (Levine and Moreland, 1990, as cited in Dörnyei & Malderez, 1997).

Dörnyei (2007, p. 723) explains that the term 'role' originally comes from sociology. He further states that it refers to the shared expectation of how an individual should behave. Roles describe the norms for a particular position or function, and they also specify what are expected from people to do. They are said to be of great importance to the productivity of the group since if learners are given the right role, they will become useful members of the team, and vice versa. Roles can change according to the nature of the tasks, but some of the typical roles include the leader, the organizer, the information-seeker and so on (Dörnyei, 2007, p.723). Dörnyei and Murphey (2003, p.110) state that these roles may emerge naturally among the members (informal roles), or teachers might encourage

learners to adopt the roles that suit them best for strategies and activities (assigned roles). At the same time, teachers can distribute the roles for everyone. Dörnyei (2007, p.724) says explicitly marked roles has the advantage of preparing learners to perform the roles effectively.

Empirical Studies on Mediating Variables in Peer Interaction

In this part of this dissertation, studies conducted by using and analysing language-related episodes (LREs) to investigate collaboration in peer interaction will be summarized. Studies that analysed the effect of task type and assigning group roles on collaboration between learners will be the main focus of this study.

Researchers have examined different variables such as the task type (Alegría de la Colina & García Mayo, 2007; Erten & Altay, 2009; García Mayo, 2002; Storch, 2001b; Swain & Lapkin, 2001), proficiency level (Choi & Iwashita, 2016; Kim & McDonough, 2008; Kos, 2013; Leeser, 2004; Sato & Viveros, 2016; Storch & Aldosari, 2013; Watanabe & Swain, 2007; Williams, 1999; Young & Tedick, 2016), pair and group dynamics (Kim & McDonough, 2008; Storch, 2002; Storch & Aldosari, 2013; Watanabe & Swain, 2007), mode of communication (Loewen & Wolff, 2016; Rouhshad & Storch, 2016), number of participants in the task (Fernandez Dobao, 2012; 2014a; 2014b; Garcia Mayo & Zeither, 2017; Lasito & Storch, 2013), task modality (written vs. oral) (García Mayo & Azkarai, 2016; Niu, 2009), task role (Aslan, 2015; Dao & McDonough, 2017; Jenks, 2007; Yule & McDonald, 1990) and type of formations of the groups (Mozaffari, 2017) in peer interaction by analysing LREs. As the aim of this study is to see the effect of task type and group dynamics among learners, the empirical studies that have investigated these variables will be the main focus of this part.

Task type. To start with, Swain and Lapkin (2001) compared data from French immersion classes. Researchers collected data using two different task types, e.g. jigsaw and dictogloss task and hypothesized that the students would focus more on focus on form in dictogloss task than in jigsaw task while working in pairs. Both of the tasks required students to produce a written product in the end. The researchers found no difference between jigsaw and dictogloss tasks in producing either lexis-based LREs or form-focused LREs.

Similarly, Storch (2001b) compared the performance of intermediate level tertiary ESL learners on three different grammar-focused classroom tasks. Similar to Swain and Lapkin's study, the students in pairs were required to produce written output in three different forms which involve a short composition, an editing task and a text reconstruction. The researcher firstly classified the types of LREs found in the data as form-based (F-LREs), lexis-based (L-LREs) and mechanics-based. Later, she categorised LREs as interactive and non-interactive. In interactive LREs, the students provided suggestions and offered counter suggestions; on the other hand, in non-interactive LREs, the students ignored suggestions or requests for assistance, or there was a little engagement by the other partner in the decision making process (p.112). She also further analysed the F-LREs for whether the interaction led to a correct or incorrect decision. The quantitative results showed that the editing and text reconstruction tasks generated more LREs and more attention to form than the composition task due to the fact that those tasks are more overtly grammar-focused tasks. The researcher also observed that there was a high interactive resolution of F-LRE across all three tasks, but in the editing and text reconstruction tasks, students engaged in more negotiations and explanations. The text construction task also triggered more L-LREs than the other two tasks. These results prove that although the three tasks generate higher proportions of LREs in the form of form-focused and lexis-based, there are considerable differences among them for triggering LREs in general.

García Mayo's (2002) study on the task types is different from the previous studies in that she collected data from EFL learners who have high-intermediate level proficiency and in laboratory setting. Similar to them, she applied two form-focused tasks (a dictogloss and a text reconstruction). The learners' interaction in both tasks was analysed and language-related episodes (LREs) were identified. The quantitative results indicate that task type had an effect on learners' attention to form. The text reconstruction generated three times more LRE turns and eight times more LREs than the dictogloss task. The qualitative results indicated that in the text construction task, learners focused on the language features, but in the dictogloss task, they seemed to focus on the completion of the task rather than discussing LREs.

Alegría de la Colina and García Mayo (2007) added a different task to what García Mayo (2002) included in her study and compared three different writing task types, e.g. jigsaw, dictogloss and text reconstruction to determine which one fosters most focus-on-form and metatalk (p.95) among EFL low-proficiency learners. The researchers calculated the number of LREs without making a distinction between the types of LREs and found similar results to García Mayo (2002)'s study. The text reconstruction generated the largest number of LREs and the greatest number of turns in overall. The jigsaw task triggered a larger number of lexical LREs than other types of tasks. However, according to their results, it is seen that form-focused LREs outweighed lexical LREs in all task types. Their findings suggest that there are differences in regard to task type in the number of LREs produced across tasks. It may be hypothesized that this is due to output derived in turn from the task demands.

Erten and Altay (2009) compared the collaborative behaviours of learners while working as a group in task-based and topic-based activities. The researchers explained that task-based activities are convergent in nature whereas topic-based activities are divergent. The participants involved 25 adult learners studying at a state university in Turkey. The study was conducted during the regular classroom hours of speaking classes and learners worked in groups during the activities. The group works were then followed by a whole class discussion with the lecturer. The researchers employed speaking tasks and the transcribed data was subject to both qualitative and quantitative analysis. The quantitative results suggest that task-based activities are more conducive to more turns and collaborative behaviours when compared to the topic-based activities. The qualitative analysis of the data showed that the participants employed four collaborative behaviours. The researchers also conducted a quantitative descriptive analysis to compare the frequency of these behaviours across different tasks. The results showed that learners employed these collaborative behaviours more in task-based activities.

Proficiency level. Other researchers have examined the effect of proficiency level such as Williams (1999). In her study, the researcher collected data from intact classes of an intensive English program. She used a variety of activities to collect learner-generated data such as correcting homework in pairs, listening to dialogues and repeating them, creating individual dialogues or other

text, using words and structures provided in their textbooks, free discussions, role-plays, and brief pronunciation and grammar activities in levels 1, 2, and 3. In level 4, she used the activities such as listening to the stories, answering comprehension questions, reconstructing stories, and doing grammar and vocabulary exercises. She observed that more structured activities such as correcting homework led to more LREs. The results showed that there is an increase in the number of LREs as proficiency rises.

Leeser (2004) also investigated how the proficiency of pairs in dyadic interaction affects the types of LREs and the amount of LREs produced by pairs during collaborative tasks. The researcher grouped learners by their relative proficiency, e.g. high–high, high–low, or low–low, and examined how this affected the amount, type (lexical or grammatical) and outcome (correct, unresolved, or incorrect) of LREs produced during a passage reconstruction task (dictogloss task). The participants involved adult L2 Spanish learners and there were a total of 21 pairs who completed the task in a content-based course during normally scheduled classes. The researcher held two sessions with the learners. The researcher held a practise session firstly by aiming to familiarize learners with the type of task that would be used for the study. During this session, the respective dyads in which learners would work together were formed, and they were given an instruction about the task they would be doing. One week later, the learners were given another passage in the form of dictogloss task and their interactions were recorded during the reconstruction phase of the task. The LREs emerged from these interactions were coded having either as lexical or grammatical focus by two raters. The quantitative results showed that the number of grammatical LREs (60%) outnumbered lexical LREs (40%). The comparison of different proficiency levels across LREs showed that as the proficiency decreases, the number of LREs decrease as well as the number of correctly resolved LREs. The researcher concluded that the proficiency of the pairs affected the amount of interaction they focused on form, the types of forms they focused on as well as how successful they were at resolving the language problems.

Similar to Leeser‘s study, Watanabe and Swain (2007) also conducted a similar study to investigate the effects of proficiency differences in pairs and patterns of interaction on L2 learning. Four core participants were matched by the

researchers with higher and lower proficiency non-core participants. The participants were all enrolled at an ESL programme at a Canadian university. The learners engaged in a task which included pair writing, pair comparison and individual writing stages. The researchers analysed the language-related episodes and patterns of interaction as well as each learner's individual post-test score. The findings showed similar results with the previous studies. The researchers provided that as the overall proficiency of the pair increased, the frequency of LREs increased as well. The researchers also distinguished the patterns of interaction among pairs such as collaborative and non-collaborative. They found that collaborative orientation, e.g. collaborative and expert/novice, to the task caused learners to produce more LREs than the non-collaborative orientation, e.g. dominant/passive. In addition, the post-test scores of the learners who engaged in collaborative patterns of interaction were higher, on which the pair's proficiency level did not have an impact. The researchers concluded that although proficiency differences had an impact on the nature of peer assistance and learning, it was the patterns of interaction, e.g. collaborative and non-collaborative, which had more influence on both the frequency of LREs and post-test performance.

Kim and McDonough (2008) had a similar design with the previous study and they investigated the effect of interlocutor proficiency on Korean as a second language learners' focus on language forms and the resolution of linguistic issues. The researchers collected data from eight intermediate Korean L2 learners who carried out the task with both eight intermediate interlocutors and eight advanced interlocutors. The learners were given two dictogloss tasks during which they reconstructed a listening text in dyads, and their interactions during the task were recorded. The researchers investigated the transcribed data in regard to the occurrence of lexical and grammatical LREs during the interactions and resolution of these LREs, and also examined the patterns of interaction. Similar to what other researchers' findings, the results showed that during the interaction with more advanced level learners, the core participants produced significantly more lexical LREs and additionally, they resolved these lexical LREs correctly. The patterns of interaction varied according to the interlocutors from different proficiency levels. This might be because the intermediate level learners tended to act as novice or collaborative when matched with advanced level learners. On the other hand, they

tended to have a dominant position when matched with the same level learners. The number of dyads which had a collaborative pattern was higher than the non-collaborative pattern in overall.

Storch and Aldosari (2013) found relatively contrasting results to the previous studies. They investigated the nature of interaction of mixed L2 proficiency level learners in a college in Saudi Arabia where the L2 proficiency of the learners in classes is quite heterogeneous. There were thirty learners who were paired as high-high, low-low or mixed-L2 pairings from each level. The learners completed a short composition task and the interactions during the task were recorded. The transcribed data was analysed in terms of learners' overt focus on language use and the amount of L2 used. The researchers specifically focused on the effect of pairing and the relationship between learners. Firstly, the results showed there is an effect of proficiency level on the occurrence of LREs. For example, the high-high pairs produced the largest number of LREs followed by high-low and low-low pairings. The number of each type of LREs (grammatical, lexical and mechanical) was the highest in high-high pairings. However, the researchers observed that there was no effect of proficiency level on the amount of L2 produced. The investigation of the patterns of interactions showed that the learners from the same proficiency level participated in more collaborative interactions, in contrast to what Kim and McDonough (2008) found in their study. On the other hand, mixed proficiency level learners tended to participate in a non-collaborative interaction. The researchers concluded their study by saying that optimal pairing of learners might depend on the goal of the activity rather than the proficiency level of the learners.

Choi and Iwashita's (2016) study on the effect of proficiency is different from the previous studies in that they looked at the effect of proficiency in group interaction rather than pairs. In their study, the researchers grouped two low-proficiency Korean L1 speaker who are learning English in Australia (core participants) with three different proficiency level peers (non-core participants), e.g. high-proficiency dominant, low-proficiency dominant, and low proficiency. They collected data from three small group discussion tasks and analysed the data in terms of the types and outcomes of LREs. The results showed that lexical LREs outnumbered grammatical LREs, which might be attributed to nature of the

task and the proficiency level of the interlocutors had an effect on the occurrence and outcome of LREs. For example, the number of grammatical LREs increased in the high-proficiency dominant groups although the contributions of core participants were really low. In general, the number of both lexical and grammatical LREs was the lowest in low proficiency groups. The analysis of the outcomes of the LREs also showed there was an effect of proficiency. The quantitative results supported the previous studies and showed that both of the core participants engaged in correctly resolved LREs when grouped with high-proficiency dominant group. The frequency of incorrectly resolved and unresolved LREs was more common in low-proficiency groups. However, the researchers concluded that attitudes toward sharing ideas in the completion of the task had a great impact on the core participants' contributions to and perceptions of group work rather than the interlocutors' proficiency.

Young and Tedick's (2016) study also contributed to the investigation of the effect of proficiency level on group composition, student interaction and collaborative dialogue. The researchers conducted their study in small group interactions taking place in a two-way immersion context (Spanish and English). The learners' Spanish interactions in a 5^{th} grade were analysed firstly in terms of the occurrence of LREs during homogenous and heterogonous group work based on the proficiency level. The results showed that the students grouped in homogenous groups participated in more episodes of collaborative dialogue than heterogonous groupings, which is similar to Storch and Aldosari's (2013) study. The researchers later conducted a micro discourse analysis informed by positioning theory to understand the interactional patterns of three core participants both in homogenous and heterogonous groups. The patterns revealed that the learners in homogenous groups tended to have a more collaborative positioning, therefore participating in scaffolding in homogenous group work. They concluded their study as homogenous groups tended to facilitate more collaborative patterns with similar level of proficiency, questioning the effectiveness of heterogonous groupings of learners in terms of proficiency level.

Kos (2013) investigated the effect of mixed-proficiency on the patterns of interaction between pairs, the type and the quantity of LREs produced. There were 10 pairs formed in either homogeneous or heterogeneous groupings from EFL

classrooms in Germany. The researcher employed a variety of tasks including both speaking and writing tasks over a term and the talk among pairs were audio-recorded during these activities. The analysis of the data involved both qualitative and quantitative methods. The transcribed data was first subject to qualitative analysis to categorise the LREs in terms of form-focused, lexical and mechanical LREs and find out the patterns of interaction between pairs. The findings suggest that the proficiency level had an effect on the patterns of interactions, i.e. the learners in homogeneous pairs showed either collaborative or dominant orientation while heterogeneous pairs showed expert/passive or expert/novice orientation to the tasks. The researcher had then a micro-genetic analysis of LREs to investigate how peer assistance is requested and provided between pairs. He found 3 assistance initiation moves and 5 assistance types provided in response. He concluded the study that although proficiency had an effect on the learners' engagement with LREs and types of assistance requested and provided, it was learners' relationships that also affected the pairs' interactions with each other.

Sato and Viveros (2016) investigated the group dynamics in the foreign language classroom to understand whether learners interacted or collaborated during the peer interaction. Their study was a classroom based research and the researchers conducted a quasi-experimental study to examine the relationship between interactional moves and collaborative acts and the effect of these on language development. The researchers used the proficiency level as an independent variable to group the participants. The learners were given a set of communicative group work activities during the regular class hours. In order to assess L2 development, past tense usage and vocabulary size were used and interactional moves such as corrective feedback and modified output were used to understand the collaborative patterns. The learners were firstly given a vocabulary test to assess their knowledge of lexical items and this was used as the pre-test. Later, five learners from lower and high proficiency group were chosen as focus groups and their interaction was audio recorded during the completion of four tasks. This interactional data were analysed in terms of the occurrences of corrective feedback (CF) and modified output (MO). Then, the data were analysed to look for the patterns of the collaboration and three patterns emerged from the data such as a) task-related collaboration, b) language-related collaboration, and

c) collaborative sentence completion. After defining these instances, the researchers quantified the results. Only except for task-related collaboration, the low proficiency level learners outnumbered the high proficiency learners in terms of CF, MO, language-related collaboration and collaborative sentence completion. According to the qualitative results, language- related collaboration and collaborative sentence completion seemed to show collaborative mindset of the learners, the results showed contrasting results in task-related collaboration. The researchers related their findings to social interdependence theory to draw a link between interactional moves, collaborative mindset and L2 learning.

Group dynamics. The researchers who investigated the effect of proficiency level of the learners on the occurrence and outcome of LREs frequently found the effect of the dynamics between learners as a more mediating variable effecting LREs.

The oft-cited study of Storch (2002) can be taken as the pioneering study that investigated the relationships between learners. In her study, the researcher investigated the nature of dyadic interaction of ten pairs of adult ESL learners over a range of tasks in classrooms. She collected data from the writing classes of the semester. The learners completed three tasks which were a short composition, an editing and a text reconstruction task. She firstly qualitatively analysed the interactions and found four different patterns of interaction in terms of the degree of equality and mutuality between learners. These were named as collaborative, expert/novice, dominant/dominant and dominant/passive. She later compared the interactions in these patterns to investigate the effect of these on language development. The quantitative results showed that during the patterns of collaborative and expert/novice interactions, there was a high number of instances that showed the language development. The number of these instances was the lowest in the patterns of dominant/dominant and dominant/passive interactions and the number of missed opportunities of learning was the highest. She concluded her study by saying that learners can scaffold each other's performance when working in collaborative and expert/novice relationships. Her division of different patterns of interaction has been widely used by other researchers in their studies.

As mentioned earlier, Watanabe and Swain (2007) and Kim and McDonough (2008) investigated the effect of proficiency level of learners on the occurrence and outcome of LREs and on the patterns of interactions between learners. In the first study, the researchers found a mediating effect of proficiency level on the production of LREs between pairs. As the proficiency increased, the learners engaged in more LREs and more correctly resolved them. However, the researchers concluded that although proficiency differences did affect the nature of peer assistance and learning, patterns of interaction had more influence on both the frequency of LREs and post-test performance.

Kim and McDonough (2008) also found similar results to Watanabe and Swain's (2007) study. They investigated which language forms Korean as a second language learners focused on and how their linguistic issues were resolved when collaborating with interlocutors from the same and advanced proficiency levels. The results showed that during the interaction with more advanced level learners, there were significantly more lexical LREs and correctly resolved ones. The patterns of interaction varied according to the interlocutors from different proficiency levels. The learners tended to have more collaborative pattern when interacting with advanced level learners.

Storch and Aldosari's (2013) study with EFL learners showed a surprisingly different pattern of dyadic interactions from previous studies. As mentioned earlier, the researchers investigated the effect of proficiency on learners' production of LREs during the composition of a short text and the dyadic relationship of learners during this interaction. There were three groups of dyads such as high-high, low-low and high-low. Although they found the highest number of all the types of LREs (grammatical, lexical and mechanical) and the highest production of L2 in high-high dyadic groupings followed by high-low and low-low, the learners tended to have the collaborative patterns of interaction in high-high and low-low pairings. The mixed level groupings had a non-collaborative pattern which let the researchers conclude as the goal of the activity might be a decisive factor rather than proficiency level in forming the dyadic relationship of the learners.

Mode of communication. With the developments of technology, computer-assisted language learning (CALL) started to dominate language learning and researchers started to study mode of communication in order to compare the

interactions in either synchronous computer-mediated communication (SCMC) or asynchronous computer-mediated communication (ACMC) or both with face-to-face (FTF) communication.

Rouhshad and Storch (2016) examined the patterns of interaction in FTF and written SCMC interaction. There were 24 adult intermediate ESL learners who participated with the same pairs in a collaborative writing task in a FTF and a computer-mediated mode (Google Docs which is a SCMC tool). The learners were required to produce a report of 150 words in pairs during the both modes and the interaction during this writing process was used fır the analysis. There were two versions of the task (Task 1 and Task 2) and two modes (FTF and SCMC) creating a total of four conditions. The researchers randomly assigned pairs to those conditions and while half of the pairs started with the FTF mode for task 1 and continued with the task 2 in SCMC mode, others started with the task 2 in SCMC mode and finished with task 1 in FTF mode. FTF interactions were audio-recorded and SCMC interactions were recorded with the help of free online software to record the screens of the learners. During the interactions, the learners were encouraged to correct their pairs' mistakes since previous studies show that learners avoid giving corrective feedback to their partners to save face. The researchers firstly analysed the patterns of interactions in both modes by referring to Storch's (2002) patterns of interaction. The results showed that the collaborative pattern was dominant in FTF mode since eight out of twelve pairs followed this pattern. On the other hand, only one pair followed a collaborative pattern in SCMC mode, but seven of them followed a cooperative mode in which they divided the labour between themselves. These pairs surprisingly collaborated in FTF mode. The analysis of the number of LREs produced in the different modes showed that there were substantially more LREs in FTF mode than in SCMC mode although the pairs spent more time on the task in SCMC mode. The number of form-LREs predominated in both modes followed by lexis-LREs and mechanics-LREs. There was no effect of mode of interaction in the amount of LREs produced across the modes since there were relatively similar percentages. Also, the resolution of the LREs did not different across different modes, and the majority of LREs were correctly resolved in both the FTF and SCMC modes. However, the learners' level of engagement in the resolution of LREs did different across two modes. The

majority of the learners in FTF mode showed extensive engagement while in SCMC mode they showed limited engagement. According to these results, the researchers concluded their study as mode of interaction did have an effect on the pattern of interaction. What was striking about their findings were the absence of the collaborative pattern in SCMC mode which also affected the number of LREs between two modes, level of engagement of the learners in the resolution of these LREs.

By extending the investigation of two modes in the previous study, Loewen and Wolff (2016) conducted a study to investigate the characteristics of peer interaction in three different communication environment; FTF, oral SCMC and written SCMC. There were forty-eight intermediate proficiency level of L2 learners engaged in three different communicative tasks, e.g. a picture differences, a consensus and a conversation task in one of the previously mentioned contexts in a sequence. The researchers investigated the interactions in terms of negotiation for meaning, recasts and language related episodes which are considered to be beneficial for L2 development across three modalities. They also compared the task effects on the interactions. The learners were assigned to one of the three modalities in dyads and were given a maximum of twenty minutes to complete each task and to move on to the next one. The interactions in FTF mode were recorded by using a video camera and online interaction was conducted through Skype and the interactions were audio-recorded and chat files were saved. The researchers analysed the data in terms of negotiation of meaning, recast and language related episodes. The mean scores of confirmation checks, clarification requests, comprehension checks and LREs were the highest in FTF mode compared to other modes. The task type did not have a significant effect and there were not any interaction effects between modality and task type. In terms of LREs, there was a scarcity of LREs across all the tasks. There were more LREs in FTF and oral SCMC mode than written SCMC groups. There wasn’t any main effect for task type or an interaction effect for modality and task type. The researchers concluded that although the interactional moves which are found to be beneficial for L2 development were common in FTF mode, the occurrences of these are quite common in oral SCMC and in written SCMC even in limited cases. These

modes could be also used as a supplementary to FTF modes to facilitate L2 development of the learners.

Number of participants. The studies mentioned so far mostly focused on interactions between pairs. However, small groups of peer interaction can be also a beneficial context for language development. To investigate the number of participants in the interactions, Fernandez Dobao (2012) conducted a study to investigate the benefits of writing tasks with pairs, groups of four learners and individual learners. To do that, the researcher assigned the same writing task to these participants and investigated the effect of the number of participants with regard to the fluency, complexity and accuracy of the written texts that the learners produced. She also investigated the nature of the interactions between learners in pairs and in the groups as they collaborate together during the writing process. There were 111 students who voluntarily participated in the study. These learners were all English native speakers and enrolled at the intermediate level classes of Spanish as a second language in the same university. The learners were given a maximum of 30 minutes to complete the task. The interactions during the composition of the written text were audio-recorded and analysed in terms of LREs. These LREs were later coded in terms of the types and the resolutions of them. The results showed that the learners in the groups produced more LREs and a higher number of correctly resolved ones than pairs although both of the groups (pairs and groups) focused their attention of language quite often. Also, the written products produced in groups were more accurate not only than the individual products but also pairs. The researcher concluded as the higher level of success achieved by the groups might be due to the different members' sharing their knowledge and collaborating to solve their problems.

Different from the previous study, Lasito and Storch (2013) compared the interactions of students who were learning English as a Foreign Language (EFL) in a junior high school in Indonesia. In total, there were seven pairs and these pairs also interacted with other learner in small group interaction, thus constituting of seven small groups. The tasks used for the interactions included oral communicative tasks which were designed in line with the curriculum and the book of the course. During the pair work, the students were given a picture depiction task in which they had different occupation cards and asked to describe the

occupations. During the small group interactions, the learners completed a jigsaw task, where each of the learners had three different pictures showing body parts and learners had to describe the cards they had in order to complete a composite picture. The learners' talk during these interactions was audio recorded and was subject to analysis. The researchers investigated the amount of learners' production of target language (TL) compared to their first (L1) language, where and why the L1 was used in those instances, and also LREs in terms of quantity, focus, and resolution of LREs. They started the analysis by calculating the turns both in TL and L1. They found that the number of turns per student was smaller when the students worked in small groups; whereas, when working in pairs, they produced more turns. However, the learners produced the same number of TL words regardless of working in pairs or in small groups. This was because the use of L1 was less common in small groups than in pairs. Later, the researchers focused on the functions of L1 use in the interactions and found two functions of L1 use such as for task management and to discuss vocabulary in both contexts. However, the reasons for the use of L1 did differ across two contexts. For example, learners in pairs used L1 for task management while they used the L1 to discuss vocabulary in small groups. The results also showed that learners produced more LREs in pairs when compared to the small groups. The learners in pairs mainly focused on lexical LREs. On the other hand, the learners in small groups focused on both vocabulary and on grammar. The proportion of correctly resolved LREs was quite high, though this was smaller in pairs than in groups. Similarly, the proportion of unresolved LREs was higher than in small groups, only a small number of unresolved and incorrectly resolved LREs were found in small groups. The researchers provoked the effectiveness of pair work in creating more opportunities for learners to engage in an oral task. However, in small groups, learners did rarely resort to their L1 when they encountered a language problem, and in turn they resolved their deliberations correctly. Based on these findings, small groups could be more beneficial for language learning than pairs for oral tasks.

Fernandez Dobao (2014a) expanded her previous study and investigated what opportunities of completing a collaborative writing task offer for attention to form in pairs and in small groups. By referring to the extensive use of collaborative

writing tasks in pairs in the literature, she compared the performance of learners on the same writing task conducted in pairs and in groups of four. A total of 144 learners, who enrolled in a Spanish intermediate level course at a public university in the United States, participated in the study. She investigated the effect of the number of participants on the frequency, resolution, and length of LREs that focused on Spanish past tense morphology specifically and the level of engagement of learners in these LREs. The learners were given a picture-based narrative task and each learner in pair work and in small groups received a set of 15 pictures and asked to rearrange the pictures to create a story and write it down in 30 minutes. To elicit past tense verbs, learners were encouraged to use the past tense. The interactions during the completion of the task were audio recorded and the texts they produced were collected. The results showed that although both of the pairs and small groups focused on form relatively similar, there was a high number of past tense LREs in small groups and the learners were more successful at resolving them, thus they created more accurate texts in the end. The length of the LREs was also longer in small groups and learners showed more evidence of elaborate engagement with past tense morphology.

Fernandez Dobao (2014b) had another study which had the similar design to the previous one and compared the opportunities for collaborative dialogue and L2 vocabulary learning in small group and pair interaction. In this study, there were a total of 110 learners who enrolled in a Spanish intermediate level course at a public university in the United States. She used the same data from the previous study and examined interactions of the learners during the same writing task in pairs and groups of four. During the data collection of the interactions, the learners were demanded to use some uncommon vocabulary along with a grammatical focus. In order to assess the learners' knowledge of specific lexical items, they were given a vocabulary task which was used as a pre-test. A similar task with the same items but in different order was used as a post-test. The researcher started to analyse interaction data by identifying the lexical LREs due to the focus of the study and then classified the LREs as correctly resolved, unresolved and incorrectly resolved ones. The results indicated that the learners in small groups produced more lexical LREs than pairs and resolved a higher percentage of LREs correctly. The findings also indicated that although the opportunities to contribute

to the conversation were limited in small group interactions for each individual learner, the number of participants involved in the interaction did not affect the learners' rate of retention of the vocabulary co-constructed in interaction. The results of pre-tests and post-tests showed that learners benefited not only from the LREs they initiated or resolved but also from observing other peers' collaborative interactions. The researcher summarized the findings as small group interaction did offer significantly more instances of L2 vocabulary learning compared to pair interaction.

Garcia Mayo and Zeitler (2017) investigated the relationship between the setting of learners either in pairs or small groups. The researchers also focused on the occurrence and outcome of LREs and L2 vocabulary learning. There were 30 EFL adult learners enrolled at a Spanish university who participated in the study either in four groups or seven pairs on the same collaborative writing task which was replicated from Fernandez Dobao's (2014b) study. A 20 items vocabulary test was given a pre-test in order to assess learners' knowledge of which words they were familiar before the collaborative task. A similar version was used at the end of the study to assess the learners' vocabulary development. The interactions during the collaborative writing tasks in pairs and small groups were recorded and analysed in terms of lexical LREs. These LREs were then further classified as correctly resolved, incorrectly resolved and unresolved and the length of the LREs was also calculated to understand the number of turns. The quantitative results showed no significant difference in the frequency of LREs produced between pair work and group work. In terms of the resolution of the LREs, it was observed that the groups were more successful than pairs. The results for vocabulary task showed that groups and pairs did have similar results. The researchers concluded that although the quantitative analysis showed no significant differences between pairs and groups in terms of the instances of LREs and vocabulary learning, qualitative results seemed to prove that learners in small groups could benefit more even if they did not actively participate in the discussion.

Task modality. Most of the studies conducted with peers have used collaborative writing tasks since the belief is that when the learners are required to produce a product, there will be many instances for LREs and in turn this will benefit L2 development.

Niu (2009) conducted a study to compare the impacts of collaborative writing tasks and oral communicative tasks on learners' attention to form. There were eight adult EFL pairs participated in the study and these learners completed two tasks. The tasks were text reconstruction tasks designed either as a writing activity or speaking activity. The learners were given thirty-five minutes to complete the task in each modality and their performances during the completion of the tasks were video recorded and the interactions were analysed in terms of LREs. The LREs were coded as lexis-focused, grammar-focused and discourse-based LREs. The results revealed that learners' attention to forms in written task and oral task was different from each other in terms of both quantity and quality. However, the learners focused on similar aspects of forms regarding the lexis. The number of lexis-focused was greater than in written task than in oral task. This was also observed in grammar-focused LREs and discourse-based LREs as well. The number of LREs was higher in all types of LREs in written product. The level of engagement of learners in deliberating LREs is also higher in written product. The learners provide a possible reason for this saying that the nature of the task might have an effect on these results.

Garcia Mayo and Azkarai (2016) investigated whether task modality had an impact on LREs and on learners' level of engagement in EFL task-based interaction. There were forty-four EFL adult participants enrolled at a major Spanish university. The researchers used four collaborative tasks. Two of them were designed as requiring the production of oral and written output, which were a dictogloss and a text editing task. Other tasks were a picture placement and a picture differences task which included only the production of oral output. The data was collected in a laboratory setting and different versions of four tasks were designed avoid task repetition. All the interaction during the task completion was recorded and transcribed verbatim. The instances of LREs were coded and the number of turns was counted. The LREs were further classified according to their types and resolution of them. The researchers found significant difference in the number of LREs produced between two modalities. Overall, the learners produced more LREs in writing tasks when compared to the oral tasks. Between the two different types of tasks, there were significantly more LREs in the text editing task than in the dictogloss task and significantly more LREs in the picture placement

task than in the picture differences task. In terms of types of LREs, there were more form-focused LREs in writing tasks while there were more meaning-focused LREs in the oral tasks. In terms of the resolution of the tasks, it was observed that the learners resolved the LREs significantly more in writing tasks than oral tasks, but they addressed LREs more frequently in oral tasks. The researchers did not find any significant difference in the level of engagement in resolving tasks between two modalities. These findings are important for EFL classrooms since the learners have limited access to the target language, teachers can use oral tasks including written parts. This is because task modality clearly does have an effect on the occurrence of LREs.

Task role. Since the previous showed not all learners worked collaboratively while interacting with their peers (Storch, 2002), some of the researchers decided to investigate the effect of assigning group roles to the participants in the interaction.

Yule and Macdonald (1990) investigated whether pairs from different proficiency level could work collaboratively if they were given appropriate interactive roles. The participants were adult ESL learners and they were grouped as more dominant and less dominant. In the study, the more dominant pair was asked to provide map directions while at the same time, the less dominant pair was asked to identify the directions in the map provided with slight differences from what the dominant pair was holding. They found that when the higher proficiency member was assigned a dominant role, e.g. information giver, there were less instances of negotiation of meaning. To the contrary, when the less proficiency member was given a more dominant role, there was more negotiation of meaning and successful resolution of conflicts.

Interactional roles have been examined by researchers from the perspective of conversation analysis (Jenks, 2007). In this study, Jenks (2007) investigated the participatory structures of tasks play what role in floor management. According to Jenks (2007), participatory structures determine how interlocutors participate in tasks. The concepts such as one-way and two-way interaction are related to participatory structures. Floor management, on the other hand, can be described as interlocutors' attempt to move the task forward and is affected by how the information between interlocutors is distributed. For example,

in one way interaction, the learner who has the information will anchor the floor while during the two-way information tasks, the direction of the floor is determined by both interlocutors' understanding of how the task should be completed. The researcher collected data from 12 dyads completing six different tasks. These tasks were all oral communicative tasks and designed either one-way information or two-way information flow. The results showed that the distribution of information constrained the floor management. According to the descriptive qualitative findings, he suggests that floor management can help language teachers make decisions in designing tasks and assigning task roles. For example, if an introverted or lower proficient learner is given a more dominant role in the interaction; he may not provide the necessary information to complete the task, which does not support the findings of the previous study.

A study on the effect of task role was conducted by Dao and McDonough (2017) recently. In the study, the researchers investigated whether the task role affected the nature of L2 learners' discussions in mixed proficiency pairs. 60 EFL adult mixed proficiency level learners participated in the study. They were given a story retell task in the first phase and then collaborative story writing. The data was collected during the regular class hours. One of learners from dyads watched a six-minute segment from an episode which was taken from supplementary teaching materials. These learners were asked later to retell the story to their partners and in pairs they created an ending for the story orally. Finally, they collaboratively wrote the entire story. During the task completion, the lower proficiency learners were assigned to either information holder or information receiver position. The interactions were audio recorded and analysed in terms of the amount, type, and resolution of LREs and pair dynamics. Once the LREs were identified, they were classified according to the previous research such as grammatical, lexical, phonological or mechanical. Secondly, the interactions were defined according to the interaction patterns. The results indicated that when the lower proficiency level learner was assigned the information holder role, there were more LREs produced. On the other hand, when the higher proficiency level learner had the task role of information holder, the learners did not produce any LREs. However, the assignment of task role to lower proficiency level learners did make no difference in correct resolution rates. Regarding the patterns of

interactions, there was a higher mutuality between learners when the lower proficiency level learners were assigned the information holder. Although this study sheds light on the effect of assigning task roles to participants, the researchers suggest conducting more studies with the same proficiency level learners and with different types of tasks in order to compare how task role affects peer interaction.

There is only one study conducted in Turkish as an EFL context to compare the effect of assigning group roles to the participants on learners' collaborative behaviours (Aslan, 2015). There were 18 intermediate level young learners who participated in the study and they enrolled at EFL private school. The researcher used a vocabulary test to compare the achievement of learners in terms of vocabulary. The researcher firstly gave a vocabulary test as a pre-test followed by an instruction by the researcher and a group work and finally a post-test. There were four sessions conducted in this flow, and during the first sessions the learners did not have roles, which means they participated in unstructured group work. For the last two tasks, the researcher assigned group roles to the learners, which means the learners participated in structured group work. The researcher compared the pre- and post-test results of these results. The findings suggest a positive effect of structuring group work on learners' performances on vocabulary tests. The researcher also observed the learners' collaboration during the group works by using an observation sheet. The quantitative results also showed that there was a positive effect of structuring group work.

Group formations. Mozaffari (2017) compared the effect of teacher-assigned and student-selected pairs while they were working on collaborative writing. A total of 40 learners who had intermediate level proficiency from an EFL institute in Iran participated in the study. The data consisted of the audio-recorded talk of pairs during the writing activity. The researcher also included pairs' texts produced as the product of the activity to compare the pairing effect. The recorded data was transcribed and was subject to analysis in terms of the type, quantity and resolution of language-related episodes. Moreover, the patterns of interaction were also determined. The findings suggest that the two pairing methods did not have a significant difference in the patterns of interactions between pairs. However, the learners in teacher-assigned pairs produced more LREs in terms of all the LREs

types, e.g. form-based, lexis-based and mechanics-based compared to the student-selected pairs. The qualitative analysis of talk of pairs showed that there was a great amount of off-task talk in student-selected pairs. The written products were also measured in regard to fluency and accuracy and it was found that teacher-assigned pairs outperformed the student-selected pairs. Teacher-assigned pairs also produced better texts in terms of organisation, vocabulary and grammar.

The studies reviewed have examined the effect of mediating variables on collaborative tasks by using language-related episodes as an analytic unit. Most of the studies were conducted in pairs rather than groups and also by employing collaborative writing tasks. Among the studies, assigning group roles to the learners in peer interaction during collaborative tasks is an under researched topic. This study will contribute to this gap and the methodology of the study will be explained in the next chapter.

Chapter 3
Methodology

This section of the dissertation will present the methodological procedures of the study. In the previous two chapters, the rationale for the current study and the review of related research were provided. This section will describe the research design including the research design, setting and participants, instruments used for the study, data collection procedures, and the data analysis.

Research design. The study first adopted a pre-experimental research design. The reason for naming this study as pre-experimental research design is that this particular research design allows studying a single group before and after providing an intervention during the experiment. In addition, pre-experimental designs do not involve a control group to compare with the experimental group (Creswell, 2009). Phakiti (2014) states that pre-experimental designs are more exploratory than confirmatory while making inferences about the relationship between dependent and independent variables. Researchers investigate naturally occurring conditions without manipulating the independent variables (Lecture Slides). Therefore, a cause and effect relationship between dependent and independent variables cannot be mentioned in pre-experimental research, but researchers investigate how the variables relate to one another. However, in pre-experimental research designs, there might be other variables that could have the potential to influence the findings and are not controlled by the researcher. These variables may involve both internal and external factors such as maturation of the participants over time or events that may happen during the pre-experiment.

The present study aimed to explore the relationship between group structuring by assigning roles to the participants and learners' collaborative behaviours rather than to test any hypotheses. Naturally occurring interactions among the learners were examined before and after the intervention was introduced. The intervention was conducted as a role training in the mid of the activities by the researcher. Other independent variables such as learners' individual differences were regarded as constant during the study and among the participants.

Among the three most common types of pre-experimental designs, a one group pre-test/post-test design was adopted for this study. This design allows studying one group of participants who will be given a treatment during the study. The participants are tested before and after the treatment. The diagram below has been adapted from Phakiti (2014, p. 57) and presents the design of this research:

Figure 2. A diagram of a one-group pretest-posttest design

Although there were two or three groups during the pre- and post-test sessions, these groups were assumed as one group. No comparisons were made between or among the groups or the participants with regard to the research questions.

Second, a time series design which is one type of longitudinal designs was adopted for the current study (Lecture Slides). Longitudinal designs allow collecting data repeatedly over a long period of time. Therefore, they enable the researcher to measure the change in variables over time. In time series design as one type of longitudinal designs, the researcher collects data at regular intervals (days, weeks, moths, etc.) multiple times before and after the treatment is given (Phakiti, 2014). The data usually consist of an aggregate measure of a group (Lecture Slides).

Time series design also allows the researcher to observe the consistency of the changes in the dependent variable before and after the treatment. Since there is not a control group, the history effect cannot be controlled, though. An example of a one-group time-series design (adapted from Phakiti, 2014, p. 74) which is also named as single-group interrupted time-series design (Creswell, 2009) is given below:

Figure 3. A diagram of one-group time series design

The overall aim of this study was to explore the relationship between assigning group roles and collaborative behaviours in divergent and convergent

tasks. To achieve this aim, a one-group time series design in which a total of eight conditions were prepared such as: a) unstructured divergent task1, b) unstructured divergent task2, c) unstructured convergent task1, d) unstructured convergent task2, e) structured divergent task1, f) structured divergent task2, g) structured convergent task1, h) structured convergent task2, in which learners participated over a period of 10 weeks.

Research methodology. The orientations to research can be categorised as positivist and interpretative paradigms. While positivist paradigm requires the use of quantitative research methods, interpretative research paradigm employs qualitative research methods (Erten, 1998). Quantitative research methods adopt a reductionist view on the data and they reduce the ideas into small sets such as variables to form hypotheses and research questions (Creswell, 2009). Positivists assume an objective reality which exists "out there" in the world. Therefore, they develop numeric measures of observations or the behaviour of individuals in order to test or verify the hypotheses. These numerical data are used for statistical analysis, and the findings can be reproduced and generalised beyond the context in which the study is conducted (Erten, 1998).

On the other hand, qualitative research methods were affected from social constructivism (Creswell, 2009). Qualitative researchers hold the view that individuals develop subjective meanings while seeking to understand the world they live in. These meanings are negotiated socially and formed through interaction with others. They are so varied that the qualitative researchers search the complexity of views rather than categorising the meanings into a few ideas. They argue that social reality is different from physical reality, and it cannot be reduced as physical reality (Phakiti, 2014).

It is also the duty of qualitative researchers to rely on the participants' view as much as possible. Therefore, they focus on the processes of interaction among individuals to make sense of the meanings people have about the world. They inductively develop a pattern of meaning or a theory rather than starting with a theory (Creswell, 2009). They focus on an individual or a group in a specific situation or context rather than generalisation of findings to other contexts (Phakiti, 2014). As Phakiti (2014, p. 8) puts forward, "qualitative research is to portray the

complex pattern of what is being studied in sufficient depth and detail in a particular context".

Although quantitative and qualitative methods seem to differ from each other, researchers may prefer to employ a combination of both paradigms (Erten, 1998; Kos, 2013; Mercer, 2010). The complementary use of both paradigms can be said to add breadth and depth to the investigation of a study. As far as the current study is concerned, this study involved both qualitative and quantitative research methods although it mainly falls for the qualitative methodology since I aimed to explore the naturally occurring interactions of the learners in task-based research context. The analysis of these interactions was accomplished qualitatively in terms of the occurrences of collaborative behaviours in two different tasks. This qualitative data was complemented by using quantitative methods such as quantifying the frequencies of the collaborative behaviours in different tasks across two sets. This allowed making a comparison across different tasks and different structures of grouping.

The next section presents the pursued methodology of the current study.

Setting and Participants

Setting. This study was conducted in the School of Foreign Languages at a state university in the capital city of Turkey whose director expressed his interest for conducting such research and offered cooperation. This respective school provides foreign language education for an academic year because medium of instruction at the Schools and Faculties of this state university involves either completely (100%), partially (30%) a foreign language or completely native language (Turkish). In this context, learners must have the skills and the knowledge of the foreign language in order to follow the lectures in the foreign language prescribed by the departments in which they are enrolled. Therefore, school of foreign languages provides a foreign language education in accordance with the academic goals of the departments. Learners are provided with a proper education on foreign language proficiency levels to fulfil the academic expectations of those departments where a foreign language is used as the medium of instruction. The foreign languages such as English, French and German are provided by the school, but English is the most common foreign

language. In addition, a foreign language education is provided to the learners who study at the departments whose medium of instruction is Turkish. In this context, learners gain a language competence level which involves necessary foreign language knowledge and skills in order to follow the related literature.

In this school, students are divided into three groups with regard to language skills and knowledge they need to pursue the educational activities in their departments. The groups are defined by the school as below:

a) *160 program groups:* The learners who will study a language and its related aspects as an academic field in the departments will be placed under this group. These departments have a complete (100%) foreign language medium instruction in one of the foreign languages mentioned before. The school aims to equip the learners in this group with the essential knowledge and skills in order to enable them to continue learning languages by keeping up with the changes in academic, professional and social life.

b) *150 program groups:* The students who are enrolled in the departments where medium of instruction is completely (100%) or partially (30%) a foreign language. The foreign language is generally English. The school aims to enable learners to follow lectures, to express themselves in written and spoken form of the foreign language, to participate in the classes effectively, and to gain the required skills for following the coursebooks and the literature of the field.

c) *140 program groups:* The students who are enrolled in the departments where the medium of instruction is Turkish. These learners do not have to attend foreign language education provided by the school of foreign languages. It is optional for these learners. The school aims to enable learners to improve learners' writing skills and to follow the field literature.

Structure of the language school. A modular course structure was being used and practised by the language school at the time of the data collection. This structure was based on the progression of students to a higher level to make sure that learners could make an effective progress in the target foreign language. The

proficiency levels were designed in accordance with Common European Framework of Reference for Languages (CEFR) and changed between A1 and C2+ (A1, A2, B1, B1+, B2, B2+, C1, C1+, C2 and C2+). The academic year was divided into four quarters and the education was accomplished in these four quarters; two quarters were completed in the fall term and the other two were completed in the spring term. Each quarter lasted for 7 weeks.

The learners who were required to attend compulsory language education took an exemption exam at the beginning of the academic year. The learners, who could not get a passing grade which was 50 from the exemption exam, were placed into groups as described above. The intended proficiency language level for the learners who attended a foreign language programme to achieve was at least B1+ at the end of the programme.

Participants. The learners were chosen B1+ level classrooms at the School of Foreign Languages. They were placed at the second group of the programme (150 Group Programme) which means that they were responsible for a compulsory foreign language education. The learners were learning English as the foreign language. The reason for choosing the learners from B1+ proficiency level was that the learners were still learning the foreign language and they were thought to have enough command of English to participate in the target language interactions.

Another reason was the time of the data collection. The data were collected in the spring term of 2015-2016 academic year. The learners had already finished two quarters of the language programme and they started to attend the third quarter of the language programme which started at the beginning of February 2016. It was much easier to find learners from B1+ proficiency level.

Contact with the participants. Initial contact with the participants was made in person during my visits to the classrooms. After getting the approval of the ethics committee (Appendix F) to conduct the present study, I met the director of the School of Foreign Languages and introduced my research. The director showed interest and gave me permission to visit the classrooms in order to invite learners to participate in the current study. I visited 6 classrooms, in which B1+ level learners were placed and introduced the study that I would be conducting.

The learners were told that the participation in the study was based on a voluntary basis. They were guaranteed that their performances during the activities in the study would not be evaluated or be part of the overall evaluation of their language education.

The present study. The study was planned as a speaking club in which the participants could join and participate in oral tasks as a group. Although there is a need to investigate learner interactions in real foreign language classrooms and there have been few studies which investigated peer interactions in genuine classrooms (Kos, 2013), this study had to be conducted as an extra-curricular activity rather than in the real classrooms in order not to interfere with the teachers' agenda. The teachers had a predetermined curriculum to cover in the language programme and they hardly allocated time for peer interactions during the regular classrooms in the current research context. Moreover, Sato and Ballinger (2016, p. 7) state that peer interaction can be assigned in any learning environment such as in the classroom, outside the classroom or in a virtual environment. It was, therefore, acceptable and feasible to investigate peer interaction outside of the classrooms as in the current study.

Sampling. The participants were chosen by using a convenience sampling method which is one of the non-probability sampling types. During my visit to the classrooms in order to invite learners to participate in the speaking club, I distributed my business card to let them reach me through my contact information. A few days later I made the call, many of the learners responded to my invitation by sending messages. Therefore, I was able to create an online group on WhatsApp application which is free and available on phones all over the world and offers simple messaging and calling in order to post the announcements to all of the volunteers in the quickest way.

There were 21 learners who positively responded to my invitation to participate voluntarily in the speaking club from the six classes. However, three of the learners never participated and they did not provide a reason for their absence. I conducted a meeting with the remaining 18 learners to meet each of them individually. This meeting had several purposes. Firstly, it let me get to know the students and explain the procedure of the study and the commitments they would need to make during the study. Once again, the learners were assured that

their performances during the activities in the study would not be part of their assessment in the language programme. They were reminded that their participation was on a voluntary basis and they were assured that they could withdraw from the study any time they felt uncomfortable. They were also guaranteed that the identities of the learners and the data collected would be kept anonymous and confidential. In addition, the time of the meetings was agreed and a tentative data collection chart was prepared during this meeting.

After the meeting, three more learners did not participate in any of the sessions of the speaking club. Therefore, a total of 15 learners remained in the study. Since I was planning to form three learner groups that involve five participants in each, the number of the remaining volunteers was enough for the current study.

Profile of the learners. The learners had B1+ language proficiency the beginning of the study. They were all adult learners and the ages of them ranged between 18 and 20. They enrolled in different departments of the state university such as medicine, engineering, nursing, and economics. These departments required either a complete or partial foreign language medium instruction for educational activities. Therefore, all the learners had to attend a compulsory foreign language programme. Since the participation in the speaking club was on a voluntary basis, the learners were not given any price for participating in this study except from some snacks for the meetings provided by the researcher.

Assignment the learners to the groups. Students were randomly placed to the speaking groups since the students came from 6 different classes. In addition, experimental research designs require the randomization in assigning learners into the groups so that each student has an equal chance of being placed in any one group (Phakiti, 2014). Moreover, Phakiti (2014) states that random assignment methods can spread the effects of any confounding variable more evenly.

Students' names were written on small pieces of paper and placed in a small bowl from which a random set of five pieces were drawn to form groups to accomplish the random assignment of the learners into prospective groups. Such a procedure of drawing students' names is commonly used in the field of SLA

research (Nestor & Schutt, 2015). The groups were affirmed by all the learners. The table 1 below summarizes the distribution of the learners to the groups and the ones who participated in the speaking club during the whole study. All the participants were given pseudo names and the first three letters of these names were used during the transcription and analysis process.

Table 1

The Distribution of Learners Who Participated in the Speaking Club

	First Group	Second Group	Third Group
Piloting	SEY MEV OKN BER MER	SEH TUG BUR ARD FAT*	SIM ZUL OZA KAN HUS*
UNST-D1	SEY MEV OKN BER BAH*	SEH TUG BUR ARD ARZ*	SIM ZUL OZA HUS*
UNST-D2	SEY OKN BER MER	SEH TUG BUR ARD	SIM ZUL OZA KAN MUS*
UNST-C1	SEY MEV OKN BER MER	SEH TUG BUR ARD	SIM ZUL KAN
UNST-C2	MEV OKN BER MER	SEH TUG BUR ARD ARZ*	SIM ZUL OZA KAN
ROLE Training	SEH BUR ARD KAN	OZA OKN MEV BER	-
ST-D1	SEH BUR ARD TUG BER	OZA OKN KAN SIM	-
ST-D2	SEH BUR MER BER MEV	KAN SIM ARD ZUL	-
ST-C1	BUR MER BER MEV	KAN ARD ZUL OKN	-
ST-D2	BUR SEH BER MEV	KAN ARD SIM OKN	-

Note: * indicates the learners who participated in the speaking club only once or twice

There was an equal distribution of the learners in terms of number and gender in the piloting session. There were three male and two female students in each group. However, some of the learners did not come after the piloting session; and, moreover new learners, who did not participate in the piloting session, joined the speaking club. The learners who participated in the piloting session stayed in their groups and new learners were randomly distributed to these groups.

There was unfortunately a fluctuation in the number of participants in the groups due to history effect (Fraenkel, Wallen & Hyun, 2012) during the study. Starting from the role training session, only 8 students remained and these learners participated in the previous sessions in different groups. Therefore, the learners were regrouped in accordance with the roles they were assigned in order to place at least three participants for each group. Only two groups were formed for the remaining study.

Instruments

This part will summarise both the materials used to gather data from learners' interactions and the equipment which helped collect the data. The materials involved tasks as well as consent form signed by the learners.

At the first meeting with the learners for a pilot session, a consent form (appendix A) was distributed to the learners to get their written consent stating that they voluntarily participated in the study. All the learners who attended the piloting session signed the consent form.

The tasks were either chosen or designed in the form of convergent and divergent tasks. Previous research has proven that closed (Long, 1990) or convergent (Duff, 1986) tasks create more opportunities for learners to co-construct meaning, and as a result, they collaborate more, which facilitates L2 development. On the other hand, during open (Long, 1990) or divergent (Duff, 1989) tasks, learners do not necessarily have to collaborate with each other.

Another reason for choosing tasks for the current study was that tasks-as-research generate data that is of interest to the researcher (Bygate et al., 2001). Moreover, any type of task can be adapted for peer interaction (Sato & Ballinger, 2016, p. 7). In the light of these, tasks were adopted in order to elicit data from

peer interactions as a group. The table 2 below presents the tasks used throughout the present study.

Table 2

The Types of Tasks Used in the Study

	TASKS
Piloting Session	What are the 5 most important decisions in a person's life? - After making suggestions and defending their ideas, the group retains five and decides on the order of importance.
Unstructured Divergent Task 1	What do you think about online dating? - Have you ever met someone from online websites? - Do you think it is a good idea to meet someone from online websites? - Do you think you may fall in love with someone that you have never met in person? - Are there any disadvantages? What may be disadvantages? - Will you continue your relationship? Will you marry in the end?
Unstructured Divergent Task 2	Is football a waste of time? - What is the point of kicking a ball around for an hour and a half? - Why in your opinion, is football so popular? - Do you think footballers are paid too much? Do they receive too much attention? - How responsible should football players be to their fans? - Why does football have hooligans when other sports such as rugby and American football don't? - What can be done to reduce football hooliganism?
Unstructured Convergent Task 1	Drawing a dream café? - You and your friends are bored of the café you frequently go. Here is the chance to design and furnish your dream café with decisions on the layout, types of services, furniture. What do you want to put in your café? You need to make a unanimous decision with your friends.
Unstructured Convergent Task 2	You are from the same student club. You want to go on a holiday together for the weekend. Unfortunately, you have a limited budget as most of the students do. So, as a group of friends, you should decide on the destination you would go. You might choose to go to a five-star hotel with all-inclusive option, but it is not possible to see around for instance the historical places or museums and so on. You might choose to go to a boutique hotel, but it only covers breakfast. You may see different places and so on. You might choose to go on a camping, but you have to stay in a tent in the nature.
	ROLE TRAINING
Piloting Session 2 with group	Can you talk about the characteristics of your ideal spouse? What are the signs that you have found an ideal spouse?

roles	
Structured Divergent Task 1	- What is cheating? How is it different from lying? - Is cheating ever acceptable? - Have you ever cheated? - What are the advantages and disadvantages of cheating? - How should cheaters be punished? - Are we morally obligated to report any cheaters we encounter? - Under what circumstances is cheating a crime? - Is cheating simply about “breaking the rules”? Or is it about exploiting them? - Is cheating more acceptable in some cultures than in others? - Are people born with a sense of fairness? - Do men and women cheat at the same rate? - How can schools prevent cheating?
Structured Divergent Task 2	What is the best age for marriage?
Structured Convergent Task 1	The craziest things each university students should do. - You will decide 5 of them and rank according to the more craziest one to the less craziest one.
Structured Convergent Task 2	You and your friends will hire a summer house for the summer holiday. Since this is the first time you will go on a holiday with your friends, you want to live in a dream one. Here is the chance for you to draw your dream summer house with your friends.

The choice of the tasks was decided with an expert in the field. During the decision process, the familiarity of the learners with the topics was ensured since previous research has suggested that more elaborate discourse is likely to be elicited by familiar topics (Li, Williams, & Volpe, 1995) and background knowledge such as topic familiarity facilitates performance on tasks (Leeser, 2007). In this regard, learners’ familiarity with the topics was thought to envoke more opportunities for interaction during their group work. In addition, there was not any attempt to elicit any linguistic focus from the tasks. The tasks that were used during the piloting sessions were not included in the analysis. Therefore, I will only summarise the ones included for the analysis in terms of collaborative behaviours.

The first two divergent tasks were designed to start a discussion among learners. There were sub-questions attached to the main question in order to prompt learners to engage in the task more. Both of the tasks were applied orally by the researcher and then written on the board to help the learners recall the sub-questions. The first unstructured divergent task was about online dating. Thinking that the learners were actively using social-media, the task was thought to trigger

more interaction among the participants. The second unstructured divergent task was related to the football. The rationale behind choosing this topic was that there would be a conflict between male and female learners; therefore, more interaction would be triggered.

The first unstructured convergent task was a drawing task for which the learners were supplied with paper and pencils. A view of this task is provided in Figure 4 below:

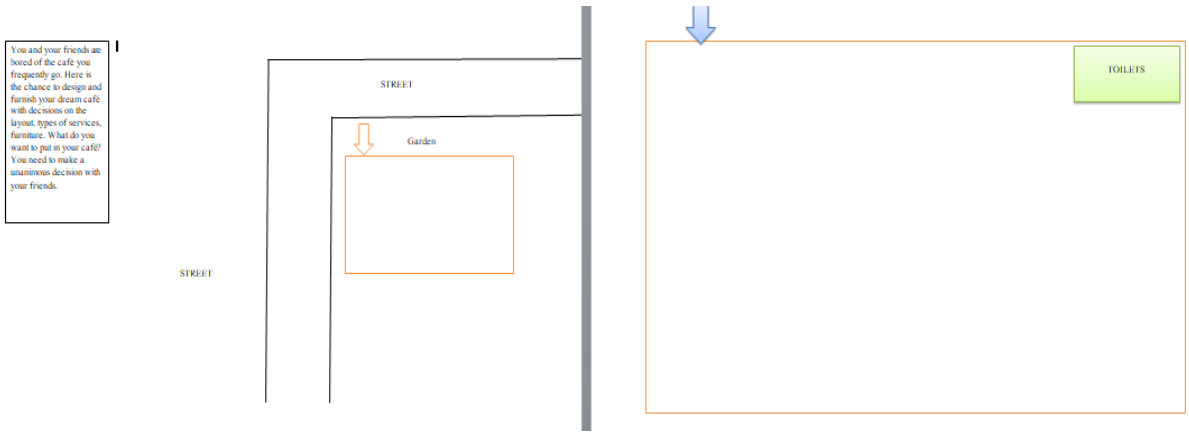

Figure 4. Unstructured convergent task 1

This task was printed double-sided on an A4 size paper. The learners were asked to discuss the features of their dream café together and draw one dream café as a group. A completed version of this task was provided in Appendices B and C. For the fourth task, the learners were asked to decide on a holiday destination with a limited budget. The instructions were given orally; only the budget the learners were expected to have was written on the board.

The fifth task was similar to the unstructured divergent tasks in which there were a main question and some sub-questions related to the main question. For the first structured divergent task, the learners were asked to talk about cheating. The main question and the sub-questions were written on a paper before the session, and this was distributed to the learners as a worksheet. The instructions for the second structured divergent task were provided only orally. Before the learners started the task, they were provided a list of possible tasks they would talk about during this session. The majority of the learners decided to talk about the ideal for marriage.

The instructions for the first convergent task were delivered orally and how the learners were required to rank their decisions were written on the board. In this task, the learners talked about the craziest things that should be done at the university. The last task was similar to the first unstructured convergent task. It was also a drawing task and the learners were supplied with paper and pencils. In this final task, they were asked to decide on their dream summer houses and draw it on the paper. However, the completed versions of these drawings were not collected by the researcher.

Technical equipment and other materials. In order to manage the data collection process, the following equipment and materials were used:

1) A business card specific to the study was prepared to distribute learners during my visits to the classrooms in order for them to reach me if they decided to participate in the study.
2) The 'WhatsApp' application was used as the medium to post and remind the times of the meetings. By using the application, it was also aimed to encourage learners to attend the sessions.
3) Six video cameras (2 for each group) with tripods and three voice recorders were used to record the interactions of the learners.
4) A qualitative analysis software called 'Transana' was used for both the transcription of the data and the analysis.
5) Colourful pens and pencils were provided for the drawing tasks in order to motivate learners during the task.

Data Collection

The meetings of the speaking club were initiated with an unofficial meeting with the learners who expressed their interest to participate in the study. During this meeting, the time of the next meetings was agreed in regard to the convenience of the learners and a tentative data collection chart was prepared. The learners expressed their preferences to meet on Mondays and Wednesdays between 13:00 and 15:00 since they had classes in the mornings on these days. However, the time and the frequency of the meetings had to be changed throughout the study. Since the language education programme was based on a

modular structure, the learners took a proficiency exam to pass to a higher level. This exam was applied at the end of the third quarter which was on the 21st-25th of March 2016. After this week, the learners had one week break before they started the fourth quarter. After the exam, some of the learners were placed in B2 classrooms, but the majority stayed in B1+ classes. Therefore, the learners had to attend the language programme at different times. In order to assure the majority of the learners to attend the remaining activities, the time of the meetings had to be changed. But, some of the learners dropped the study due to the inconvenience caused by the change to their personal schedules. A detailed flow of the data collection is shown in Table 3 below.

Table 3

Data Collection Procedure Chart

Unofficial Meeting	26.02.2016
Piloting Session	29.02.2016
Step 1: Unstructured divergent task1	02.03.2016
Step 2: Unstructured divergent task2	07.03.2016
Step 3: Unstructured convergent task1	09.03.2016
Step 4: Unstructured convergent task2	16.03.2016
ROLE TRAINING	21.03.2016
Step 5 : Structured divergent task1	23.03.2016
~~Step 6 : Structured divergent task2~~ (excluded from the data)	~~19.04.2016~~
Step 6 : Structured divergent task2	21.04.2016
Step 7: Structured convergent task1	26.04.2016
Step 8: Structured convergent task2	28.04.2016

Data were collected in separate classrooms in different buildings of the university. All the meetings were both video and audio recorded in order not to miss any meaningful moment during the interactions. For each learner group, two video cameras and one audio recorder were provided. During the group interactions, the learners sat in a circle position to face each other and video

cameras were placed in two different angles in order to record the nonverbal communication of the learners. The audio recorders were put into the middle of the groups in order to eliminate the background voice or the other learners' conversation from distracting the quality of the recordings as much as possible. However, since three of the groups were given the tasks simultaneously in the same classroom, it was not fully possible to eliminate the voices in the background. I, myself as the researcher, participated in the study as a non-participatory observant and tried not to interfere in any moment of the data collection (except for allocating group memberships; setting the agenda and giving task instructions). The figure 5 below shows an example of sitting plan of the learners during the data collection.

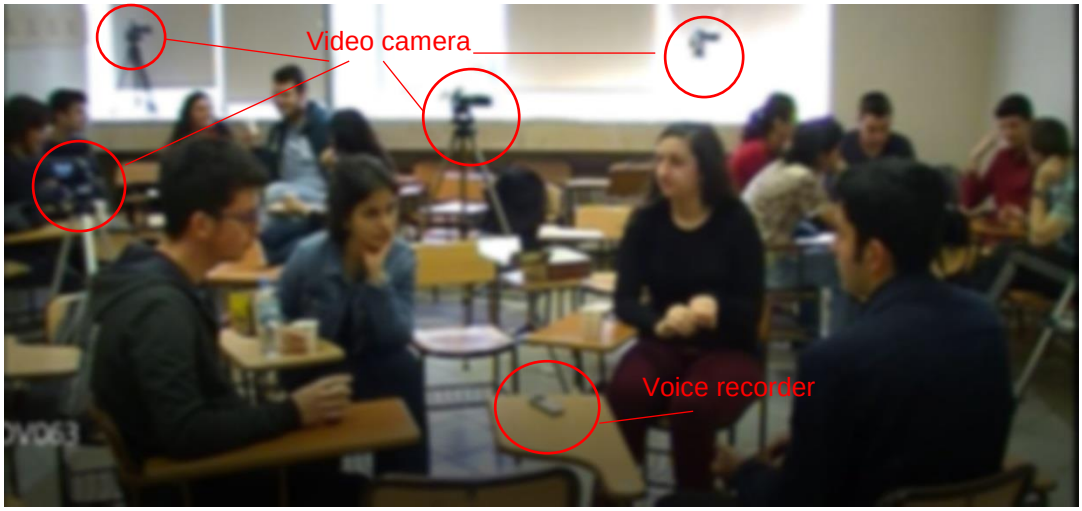

Figure 5. The setting plan of the groups

The meetings of the speaking club were initiated with a pilot session prior to the actual data collection process due to some reasons. To start with, since students came from different classes, it was the first time for some of them to meet the other learners with whom they would work in the same group. By conducting a pilot study, I aimed to make the learners get acquainted with each other in order to eliminate the social dynamics interference.

Another reason for conducting a pilot session was to exemplify the types of the activities that I would bring to the speaking club. This would also help learners be familiar with working as a group and the types of tasks that I would assign them to work on. Lastly, since I would use video cameras and audio recorders, some of the learners might not feel comfortable due to the presence of video cameras

although it has been proven otherwise (Mondada, 2013). Also, I would be in the classrooms and observe the learners even if I would not intervene in their interactions. This trial session was also employed in order to eliminate the negative impact of the presence of the researcher.

The trial meeting was conducted in a meeting room in the university campus. There were only four video cameras available in total during the pilot session. Except from the third group, I only set up one video camera for each group. I used the extra camera to record the third group's interactions. There was only one voice recorder during this session and it was given to the second group.

In the pilot session, the learners were given a task consisting of both divergent and convergent task features. Although the interactions of the groups during the session were recorded, they were not included in the analysis. However, it helped foresee the average time that learners would spend during the study. The average time the learners spent on the completion of the task was thirty five minutes during the pilot session.

During the whole data collection process, there were both convergent and divergent tasks that had different internal features. The duration of each task was dependent on the learners' actual performances and the nature of the task/type of speaking. The table 4 below presents the overall time that learners as a group spent on completing the tasks.

Table 4

Duration of the Tasks

	First Group	Second Group	Third Group	TOTAL
Unstructured Divergent Task 1	00:29:11	00:29:00	00:29:07	01:27:18
Unstructured Divergent Task 2	00:18:40	00:28:45	00:28:13	01:15:38
Unstructured Convergent Task 1	00:41:27	00:41:18	00:41:24	02:04:09
Unstructured Convergent Task 2	00:35:17	00:32:24	00:34:00	01:51:41
Structured Divergent Task 1	00:37:52	00:39:49	0	01:17:01
Structured Divergent Task 2	00:32:12	00:25:04	0	00:57:16
Structured Convergent Task 1	00:36:54	00:35:44	0	01:12:38
Structured Convergent Task 2	00:35:46	00:29:51	0	01:05:37
TOTAL				Approximately 11 hours

In total, I collected 11 hours of group interaction although in the last four tasks, there was one group fewer than the first four tasks. This duration was appropriate as Seedhouse's (2004) claim that a total of between five and ten hours is generally considered a reasonable database to be able to generalize and draw conclusions.

The actual study started with an unstructured divergent task. The reason of starting with an unstructured task was to see the collaborative behaviours as naturally occurring between the learners. The other reason of first assigning a divergent task was that the learners might try to find a solution or converge on a single outcome during the divergent tasks instead of discussing the task at hand. This could affect the nature of the interactions during the divergent tasks. The first four unstructured tasks were completed by the learners as they gathered for the speaking club. No intervention was provided during unstructured sessions and learners' naturally occurring interactions were recorded.

Structuring group work. The other half of the tasks were assigned as structured tasks. By structured tasks, it was meant that learners were given specific roles during their participation in the tasks. The reason of assigning roles to the participants is that roles contribute to the productivity of the group because if

learners are given the right role, they will become useful members of the team. The nature of the tasks might be a factor on the types of the roles, but there are some typical roles such as the leader, the organizer, the information-seeker, etc. (Dörnyei, 2007, p. 723). These roles may emerge naturally among the members (informal roles) as in unstructured tasks, or teachers might encourage learners to adopt the roles that suit them best for strategies and activities (assigned roles) as in structured tasks. Moreover, Dörnyei (2007, p. 724) says explicitly marked roles has the advantage of preparing learners to perform the roles effectively. Therefore, an explicit training on group roles was provided to the participants in the next session.

Assigning roles to the participants. Before the training, a worksheet (appendix C) explaining the requirements of each role was prepared and distributed to the learners for the role training session. As suggested by Cohen and Lotan (2014, p. 123) for assigning group roles, I went over each role together with the learners, and explained orally the duties of each role to be employed during the interactions. Each role was explained both in English and in learners' L1 to ensure that all the participants clearly understood what was expected from each role.

For this particular context, the roles were adopted from an internet source (Word File) provided by Carnegie Mellon University Eberly Center. The roles were chosen based on the nature of the tasks and the size of the groups. These included facilitator, timekeeper, recorder, reporter, devil's advocate and checker. These roles were adopted because they concern how the work will be done rather than the task content (Cohen, 1994; Cohen & Lotan, 2014). The responsibilities of the roles are explained in Table 5 below:

Table 5

Possible Roles and Their Duties during Discussions

Roles	Responsibilities in the group
Facilitator	Moderates team discussion, keeps the group on task, and distributes work.
Timekeeper	Keeps the group aware of time constraints and deadlines and makes sure meetings start on time.

Recorder	Takes notes summarizing team discussions and decisions, and keeps all necessary records.
Reporter	Serves as group spokesperson to the class or instructor, summarizing the group's activities and/or conclusions.
Devil's advocate	Raises counter-arguments and (constructive) objections, introduces alternative explanations and solutions.
Checker	Checks to make sure all group members understand the concepts and the group's conclusions.

The distribution of the roles was randomly assigned to the participants. The names of the roles were written on small papers and learners chose their roles based upon the drawing from these papers. Since it was estimated that there would be five learners in each group, the roles of facilitator and timekeeper were assigned to the same learner.

After an agreement was accomplished on the roles of the learners, a pilot session was conducted for helping learners get acquainted with their group roles. There were only eight learners who attended this session; therefore, it was only possible to from two groups. The role of checker was not assigned to anyone during the pilot session because there were only four students in each group. Three learners from the first group, three learners from the second group and two learners from the third group were present at this session. The learners from the first and second groups stayed in their groups. The two learners from the third group were sent to either of the groups according to their roles. After ensuring that the participants in each group had different roles, a divergent task was assigned for learners to practice the roles during their interactions. The learners were asked to talk about the characteristics of their ideal spouses.

Starting from the role training and the pilot session, it was possible to form only two groups. Besides, there were not always five learners in one group. Therefore, two roles were assigned to one participant, thinking that it would be meaningless to take out any of the roles since they created a unity within the group interaction. Additionally, due to the absence of some learners in the sessions, the roles assigned to the learners had to be changed. The table 6 below shows the assigned roles to the participants during the structured tasks including the trial session as well:

Table 6

The Assigned Roles to the Participants

	Roles	Pilot Session	ST-D1	ST-D2	ST-C1	ST-C2
Group 1	Facilitator-Time-keeper	ARD	ARD	MER	MER	SEH
	Recorder	SEH	SEH	SEH	MEV	MEV
	Reporter	KAN	TUG	MEV	MEV	MEV
	Devil's advocate	BUR	BUR	BUR	BUR	BUR
	Checker	-	BER	BER	BER	BER
Group 2	Facilitator-Time-keeper	OKN	SIM	SIM	OKN	SIM
	Recorder	OZA	OZA	KAN	KAN	KAN
	Reporter	MEV	KAN	KAN	KAN	KAN
	Devil's advocate	BER	OKN	ARD	ARD	OKN
	Checker	-	OKN	ZUL	ZUL	ARD

The remaining four tasks were completed with the learners with the assigned roles as it was illustrated in the table above. All the instructions for the tasks were delivered in L2 by the researcher. Only during the first unstructured convergent task, the learners in the first group claimed that they had not understood what was required in the task. Therefore, I repeated the instructions in L1 to clarify the task. In addition, after the learners completed the tasks, a follow-up activity as a whole class discussion was performed by the researcher. However, neither of the instruction giving sequences nor the whole class discussions was included in the analysis.

For each meeting, the video cameras and voice recorders had to be set up since the data were collected in separate rooms. For the first four tasks, the technical equipment was set up by the researcher and a colleague of her. For the remaining tasks, the researcher along with the participants set up the technical equipment.

Data Analysis

The oral interaction collected from the learners' interactions was transformed into the written form. Next section will provide how the transcription of the data was accomplished for the current study.

Transcription of the data. The recorded data were transcribed verbatim between June 2016 and December 2016. The transcription of the data was completed by researcher. I started to transcribe by using Microsoft Word 2010 for Windows 10 and a media player such as BS player. However, it was not feasible and easy to handle doing transcription since there were two different types of recorded data, i.e. video-recorded data and audio-recorded data.

I mainly referred to the video recorded data for the transcription and analysis. However, since the data collection was conducted with three groups simultaneously (Figure 5), I sometimes had to consult to the audio recorded data in order to understand what the learners were telling. While transcribing the data with Microsoft Word and a media player, I was trying to control the video file manually to pause and play on BS player and then transcribing on Microsoft Word. When the learners' talk during the video recordings was not clear due to the background noise, I referred to the audio recordings. Therefore, I had to move between the files in order to transcribe the recordings but it would take very long time to transcribe the whole data in such a way.

I decided to use a software which would help handling the recorded data and doing the transcription simultaneously. Therefore, a professional version of Transana Software was used for the transcription of the remaining data. The reason of choosing this software was that it allows the researchers to synchronise more than one video recording and transcribe the data simultaneously. The software also helps run qualitative analysis of video and text data together in a single analysis. Although conversation analysts mostly prefer using this software to conduct a detailed transcription, it helped me a lot both during the transcription process and the analysis.

A selected list of Jefferson (2004) transcription conventions (appendix D) were used for the transcription of the recorded data. Mercer suggest that (2004, p. 147) for any type of discourse analysis, the transcription of talk is important

because it represents what is actually said. The transcribed talk should allow that speakers' utterances are not misinterpreted and also much information relevant to the analysis is included in the transcriptions. He also states that the research questions and the aim of the study determine the level of detailed transcription.

I did not focus on the details while transcribing the data. For example, the non-verbal actions such as exhalation or inhalation of the learners, rising or falling intonation, etc. were not included in the transcription in contrast to what conversation analysts do while transcribing the data and commenting on these detailed behaviours. Mercer (2004) suggests that the aim of this study and research questions have an impact on the details of the transcription. In this regard, non-word utterances (Mercer, 2004, p. 147) such as 'err/erm, oh, huh' were included in the transcription when they carried a communicative function in the interaction. The talk in learners' first language was transcribed in the first language, and the translation into L2 was provided under the sentence in italics. An orthographic transcription was used to transcribe the interactions. When the learners produced an incorrect transcription, a comment was written such as "((wrong pronunciation))" near the word. The transcription conventions that were used extensively during the transcription of the data are illustrated in Table 7 below. A total of 20 group interactions were transcribed by using these conventions and the procedure explained above.

Table 7

Transcription Conventions used in the Current Study

Symbol	Use
(0.2)	A number inside brackets denotes a timed pause. This is a pause long enough to time and subsequently show in transcription.
[	Square brackets denote a point where overlapping speech occurs.
( )	Where there is space between brackets denotes that the words spoken here were too
(XXX)	unclear to transcribe
(( ))	Where double brackets appear with a description inserted denotes some contextual information where no symbol of representation was available.
::::	Colons appear to represent elongated speech, a stretched sound
-	Indicates an abrupt halt or interruption in utterance.
° °	Indicates whisper or reduced volume speech.
? or ↑	Indicates rising pitch.

$word$	Dollar sign indicates that the speaker utters the word with a smile
Bold	The utterances in bold indicates the analyst's particular interest

Making sense of transcribed data. Having finished transcribing the data, I referred to the previous literature on collaboration in peer interaction. The most common unit of analysis used to understand collaboration was language-related episodes (LREs) (Sato & Viveros, 2016, p. 94). Previous research on the investigation of different task types on collaboration (Alegría de la Colina & García Mayo, 2007; García Mayo, 2002; Storch, 2001b; Swain & Lapkin, 2001) has been mostly conducted on quantification of the LREs as well.

There are only three studies (Beatty & Nunan, 2004; Erten & Altay, 2009; Gillies, 2006) which described collaborative strategies or students' verbal behaviours during learner interactions. Others described some discourse moves during collaborative dialogue (Zeng & Takatsuka, 2009) or language-related episodes (Kos, 2013) or in collaborative learning environment (Johnson & Johnson, 2001). These collaborative discourse moves or strategies were related to either computer-mediated communication (Beatty & Nunan, 2004; Johnson & Johnson, 2001; Zeng & Takatsuka, 2009) or writing tasks (Kos, 2013). There was no mention of collaboration in Gillies' (2006) study. Only Erten and Altay's (2009) study was left as similar to the current study. However, the authors' scope was really small to catch all the collaborative behaviours that learners employed during task-based interactions.

Sociocultural theory and analysis of tasks. One of the concerns of SCT researchers is how performance is dependent on the interaction of the individual and task (Appel & Lantolf, 1994) rather than the properties of the task. Secondly, they aim to investigate how tasks serve as a form of mediation that may lead to learning. SCT theorists also make a distinction between a task and an activity (see activity theory, Lantolf & Thorne, 2006, p. 233) and they claim that the same task can result in different kinds of activities when performed by different learners as well as when performed by the same learners at different times. This claim was confirmed by a number of studies (Batstone, 2012; Coughlan & Duff, 1994; Platt & Brooks, 1994; Roebuck, 2000). Ellis (2003, p. 185) provides the reason for such a distinction as learners' constructing the activities according to their motives and

goals while performing a task. However, this does not mean that the inherent properties of the task do not affect the learners' performances on the task.

In sociocultural SLA, language learning involves both developing the means for mediating learning and the language itself. Lantolf (2000a) provides three types of mediation in second language learning which involves: 1) Mediation by others in social interaction; 2) Mediation by self through private speech; and 3) Mediation by artefacts such as tasks and technology. According to the sociocultural theory which this study was grounded, interaction is seen the primary means of mediation and interaction either in dialogic or monologic form can mediate learning (Ellis, 2003, p. 185), but dialogic interaction is seen as central (p. 177). Through dialogic interaction, learners progress from object-regulation to other- and lastly self-regulation, which are one of the key tenets of SCT, through the notion of scaffolding which is defined as the dialogic process by which one speaker assist another to perform a function and of particular relevance to the study of task-based learning.

Collaborative dialogue (Swain, 2000), which is defined as 'dialogue in which speakers are engaged in problem solving and knowledge building', has later become a more famous term than scaffolding. These constructs are viewed to be of big importance for exploring how tasks can help L2 development (Ellis, 2003, p. 183). During the accomplishment of moving from object- regulation to self-regulation, collaboration is seen as central and tasks can serve as tools for creating collaborative acts in which learners participate in. However, these opportunities are not created by the tasks themselves, but rather by the activities emerged from how learners perform those tasks.

In addition to collaborative dialogue, Sato and Viveros (2016, p. 94) argue that a most common unit of analysis used to understand collaboration is language-related episodes (LREs). This measurement is defined as "any part of dialogue in which students talk about the language they are producing, question their language use, or other- or self-correct" (Swain & Lapkin, 1998, p. 326). Similarly, in the studies summarised in the previous chapter, either LREs or collaborative dialogue were mostly employed to understand the collaboration in peer interaction. However, since SCT has favoured detailed 'micro-genetic' analyses in a task-

based research, there is a need to conduct detailed analyses of the way how collaboration actually occur while learners performing a task (Ellis, 2003).

Data analysis method. A qualitative analysis was adopted to have a closer look into the learners' discourse to search for the collaborative behaviours in different types of tasks. A grounded theory, particularly a constant comparison method was adopted to find out the collaborative behaviours in task-based group interactions. From this perspective, the coding and the analysis were based on an exploratory nature rather than confirming any predetermined scheme.

Constant Comparative Method (Glaser & Strauss, 1967) helps the researcher to draw categories from the data instead of pre-determined categories through comparing, contrasting and categorising (Murray, 2009, p. 51). Although there are studies which investigated collaborative strategies (Beatty & Nunan, 2004) or students' verbal behaviours (Gillies, 2006) during collaborative activities, an unmotivated look into the learners' interactions was adopted in order not to miss any collaborative behaviours in the current study.

Heigham and Croker (2009) define the constant comparison method:

> as a method of data analysis from grounded theory in which the researcher constantly compares new data to data already placed in existing categories, to help develop and define that category and decide if a new category should be created. (p. 309)

In order to initiate the analysis through this method, Heigham and Croker (2009) suggest that the data be coded first. During coding process, the text which expresses a particular idea is given a label or names. As the coding is pursued, the new codes emerging from the data is compared to the previous ones. If they do not match, a new label is given to the latest one.

Coding the data for collaborative behaviours. During the transcription process, I took some notes for possible collaborative moments in the interactions. After the transcription phase was finalised, the transcripts were read several times to obtain a possible pattern of collaborative behaviours through using Transana. This enabled to create a collection of collaborative moments for each task and also for each group.

These initial patterns were described and were given possible labels. 23 different collaborative behaviours were found during the initial phase of the coding. However, I realised that there might be a possibility of making mistakes by overlooking the similarities and differences during this initial analysis. Therefore, a second round of analysis was conducted to have a more robust analysis of these collaborative behaviours.

All the collections of collaborative behaviours found in the first analysis were printed out. These were coded again by using the initial labels. The emerging codes were written in MS Excel file to be able to run a filtering procedure for the different types of collaborative behaviours. When this procedure was finalised, a filtering procedure was performed to search for the same codes across different tasks and groups.

13 different codes of collaborative behaviours were identified after a constant comparison was conducted among the codes. These are named and described in the following table.

Table 8

Collaborative Behaviours Identified in the Study

1) Provision of the word/phrase	When the current speaker does not know or recall an L2 word, other learners may provide him/her with the L2 equivalent of the word. This is solicited by the current speaker in L1.
2) Reconstruction of others' turn	When the current speaker uses an incorrect word, other learners correct the speaker. When a learner produces incomplete or structurally incorrect utterance, his partners reformulate his utterance in a well-structured form.
3) Request for clarification	Learner(s) in the group interaction may elicit a clarification of what the speaker has just said. This is done either by repeating a word which the interlocutor has uttered or by using wh-type of questions. As a result of clarification requests, interlocutors reformulate the information previously given or bring new information to the interaction.
4) Comprehension check	The current speaker checks the understanding of his or her previous utterance by other learners in the group. This is done

	usually by using an explicit 'do you understand' question by the current speaker.
5) Summary of the others' turn	An interlocutor provides a summary of what has been previously uttered by another learner in the group. This is done without any solicitation from other learners. It serves the function of helping other interlocutors understand what the current has just uttered.
6) Request for explanation	An interlocutor may ask for an explanation on the previous speaker's utterance. This is typically done by using wh- type of questions.
7) Request for information	This refers to the instance when an interlocutor elicits the meaning of an L2 word, extra information or how to translate an utterance which is in L1 to L2. In the case of a lexical item, this collaborative behaviour is followed by a provision of L1 translation or L2 synonym or explanation with body language. Learners rarely use L2 to explain the meaning of the word.
8) Provision of the L1 translation of the word/ utterance	If the speaker uses a word or a phrase after checking from online dictionary, the speaker translates the word or the utterance in a quiet voice just after she/he finishes his/her utterance in L2. This is done usually without being solicited any request for information or clarification from the other learners.
9) Pooling knowledge / ideas	When the current speaker finishes his/her utterance, other learners may sometimes expand his/her idea by adding more information to what he/she has previously provided.
10) Encouragement for participation	A partner in the group may encourage the current speaker to relax or to continue his/her speech or to participate in the conversation. This is done when a learner may refrain from taking turns during the discussions due to the fact that she uses an incorrect word or she/he claims she/he cannot find any idea regarding the task.
	In addition, a speaker sometimes interrupts his/her partner's speech who takes less turns than other learners in the group. In these cases, There is sometimes an explicit exclamation

	such as ‘X is speaking’.
11) Task policing	When a learner starts to talk about something irrelevant to the task, other learners in the group may direct the speaker to turn to the task. This can be done by elaborating on the roles.
12) Simplification of the task	When a learner does not understand what is required to do in the task, she/he may ask for an explanation. The partners either explain in L2 by simplifying the words or by translating into first language.
13) Language policing	When a learner uses L1 during the interactions, her/his partners may warn her to use L2.

The detailed explanations of the collaborative behaviours were provided in Chapter 4, where also each category was exemplified with the extracts from the current study. A reliability check of these collaborative behaviours was conducted with an inter-rater reliability check.

Reliability checks for the codes. After all the transcripts were analysed in terms of the collaborative behaviours, a second coder was invited to code some part of the data. The coder was my colleague and she was also enrolled in the PhD programme. She has quite experience in qualitative research as she has written her M.A. thesis by using both quantitative and qualitative research methods.

For the reliability check, the coder was first given training on the coding scheme and each code was exemplified with an excerpt from the unselected transcripts. The coding scheme was discussed together to avoid any uncertainties about the labels and their descriptions. The coder read the descriptions carefully, and, later she practised coding the data according to the scheme used in the study.

The transcripts of 4 tasks were chosen randomly out of 20 tasks, representing approximately 20% of the transcribed data for the reliability check. The transcripts were related to the different types of tasks and different structures. At the beginning of the coding, some help was provided with the analyses. As she became more confident with the codes and the procedure, I minimised the amount of help. When she expressed confidence in coding the data in accordance with

the scheme, the actual phase of the reliability check was initiated. The initial training lasted about 40 minutes, but the actual coding lasted around 3 hours since there were some breaks during the coding process.

The two most common methods are to use Cohen's Kappa and Spearman's Rho in calculating inter-rater reliability. Cohen's Kappa is used when the rating is nominal and discrete (e.g., yes/no) and on the other hand, Spearman's Rho is used for more continuous, ordinal measures (e.g., scale of 1-10), and reflects the correlation between the ratings of judges. However, since the codes do not meet either of the rating systems, the following formula provided by Young (1996) and also used by Erten (1998) was employed to calculate the inter-rater reliability. 'I' represents the researcher and the coder is given the letter 'C':

$$\frac{\text{Number of collaborative behaviours coded the same by I + C}}{\text{Number of strategies coded by I}}$$

The coder and the researcher coded a total of 105 identical collaborative behaviours out of 127 instances. When the inter-rater reliability is calculated according to the formula given above, it is found to be 83% which is a satisfactory number for the further analysis of the data.

Quantitative analysis. My approach to data analysis was mainly qualitative in nature. However, some quantitative elements were added to the analysis to support the qualitative findings as suggested by Mercer (2004, 2010). The quantitative measures such as calculation of number of turns and words were used to show learners' engagement in different tasks.

Additionally, the quantitative elements of descriptive statistics such as mean and frequency counts were conducted in order to compare the effects of task types and structuring group work on learners' collaborative behaviours (Kos, 2013; Storch, 2001a). In order to clarify which methods were used for each question, a summary of the data analysis will be provided in accordance with the research questions in the next part.

Summary. This chapter has first provided the research design of the current study. It has further described the setting of the study and participants. A speaking club was set up by the researcher to investigate peer interaction since it was not possible to observe peer interaction much in regular classrooms.

Data collection process has been explained and the materials used have been described in detail. It has also introduced how the structuring group work was managed for the current study.

The transcription of the oral data and how the collections were formed have also been explained. The analysis of the transcribed data has been provided. The following research questions have been formed in the current study:

1. Is there an impact of different task types on learners' L2 production?

A quantitative analysis was employed to understand the engagement of the learners with the tasks and to measure the complexity of learners' production. Among the types of measurements for measuring complexity (Ellis & Barkhuizen, 2005), interactional measure which included calculating number of turns and mean turn length was chosen. Calculating number of turns helped measure each speaker's contribution to the dialogic discourse. Adopting a sequential-production model (Sacks, Schlegloff & Jefferson, 1974), turn constructional units were calculated based on the transcriptions of the interactions. Similar to Garcia Mayo and Azkarai's (2016) measurement of turns, the starting point of a turn was taken when a learner started to talk and finished when another student began a new utterance.

Ellis and Barkhuizen (2005) suggested using mean length of turns alongside with number of turns measurements. In this study, the total number of words was counted and then divided by the total number of turns to understand mean turn lengths. To count the number of words, all parts of speech such as nouns, verbs, adjectives, adverb, pronouns, prepositions, conjunctions, determiners and exclamations were calculated. The non-word utterance "huh" was included in the calculations when it signalled a clarification request. However, non-word utterances such as hesitation markers "e.g. err" were not included in the calculation of the words.

2. What collaborative behaviours do the learners display in L2 task-based group interaction?

A qualitative analysis through constant comparison method was adopted to find learners' collaborative behaviours in the interactions.

3. What are the most frequently observed collaborative behaviours?

The collaborative behaviours found in the second question were turned into numerical data for each task and group. The frequency counts of these numerical data were conducted to answer this question.

4. Do the types of tasks exert any impact on collaborative behaviours?

The numerical data of divergent and convergent tasks were subject to frequency analysis to understand the effect of task type on collaborative behaviours.

5. Do assigning group roles to the participants have any impact on collaborative behaviours?

The numerical data of unstructured and structured tasks were subject to frequency analysis to understand the effect of group roles on collaborative behaviours. Next section will report the findings of each research question described above.

Chapter 4
Findings

This study is mainly a qualitative study, including some quantitative elements in the analysis as well. In this part of the dissertation, findings from the quantitative and qualitative analysis will be reported. The results will be provided for each research question in separate sections. The first part of the chapter will present the results from descriptive and inferential statistics with regard to the interactional measurement of language production complexity, accomplished by counting the number of turns and measuring the mean turn lengths for each task session. In the second section, results from the qualitative analysis of the present data will be reported and supported by extracts from the data where necessary. The remaining sections will again provide quantitative results from descriptive statistics with regard to the quantification of the qualitative findings.

The Complexity Measurement of Learners' Production during Peer Interactions

This section presents the quantitative results of the first question whether different task types had an impact on the learners' taking turns. The results will also yield results for understanding the complexity of language production for different tasks.

Learners' engagement during the tasks. The total number of turns were counted for each group and for each task session (divergent vs. convergent and unstructured vs. structured) as described in the methodology chapter. This quantification helped measure the behavioural dimension of engagement and describe learner engagement by quantity, as conducted by Dörnyei and Kormos (2000). Edstrom (2015), however, warns that counting the words may not provide a clear evidence of participation or information about its quality and depth (Ellis & Barkhuizen, 2005). Still, it helps to have an overview of the distribution of conversational space.

In order to illustrate the calculations of the turns, the extract 1 was taken from the first unstructured divergent task session of the third group. In this extract, there are nine turns taken by the learners in total. ZUL in this particular moment had five turns while SIM had four turns.

Extract 1. What do you think about online dating?

Number of Turns	*First Unstructured Divergent Task- Group 3*
1	ZUL:I used wechat application and err I shake my phone and err my phones (1.0) found nearly err ((draws a circle with her finger))
2	SIM: people
3	ZUL: yes
4	SIM: in the peo- in the near people
5	ZUL: and use application
6	SIM: yes
7	ZUL: err and I meet (2.0)
8	SIM: one per[son
9	ZUL: [him yes

During the calculation of the number of turns, off-task talk where learners were talking something irrelevant to the task both in L1 and L2 was omitted. Only when the learners talked about the task either in L1 or L2, these turns were included in the calculations. Moreover, number of turns was further classified as target (TL) and non-target (NL). Target language (TL) turns involved the turns where learners were using English while non-target language (NL) turns consisted of the turns where learners were using their native language which was Turkish. The table 9 below summarizes the number of turns taken in each task session per group.

Table 9

Number of Turns Taken per Session

Session types	Number of turns	Mean of turns per group	Number of TL turns	Mean of TL turns per group	Mean of TL turns per TASK
Unstructured Divergent Task 1	1096	365.3	981	327	322.83
Unstructured Divergent Task 2	1074	358	956	318.7	
Unstructured Convergent Task 1	2602	867.3	2246	748.7	802
Unstructured Convergent Task 2	2775	925	2566	855.3	
Structured Divergent Task 1	1413	706.5	1197	598.5	459.75
Structured Divergent Task 2	781	390.5	642	321	
Structured Convergent Task 1	1196	598	936	468	473.5
Structured Convergent Task 2	1179	589.5	958	479	

The numbers indicate that the total number of turns taken per task session showed a difference between divergent and convergent tasks. Total number of turns taken during the first and second unstructured divergent tasks in the first column was similar to each other. During the first unstructured divergent session, the learners produced a total of 1096 turns while in the second unstructured divergent task, they produced 1075 turns. Similarly, the mean values of the turns per group during both first and second tasks were closer to each other. The mean value of the total number of turns for the first unstructured session was calculated as 365.3 and 358 for the second unstructured divergent task, respectively. The number of TL turns yielded similar results. There were 981 TL turns in total in the first unstructured divergent session with a mean value of 327 per learner group.

On the other hand, the learners produced 956 TL turns with a mean value of 318.7 per group.

When the total number of turns taken during the unstructured convergent task sessions was compared, a task type effect on learners' taking turns could be observed. Overall, the total number of turns during the unstructured convergent tasks nearly tripled the total number of turns taken during the unstructured divergent tasks. To start with, the learners had a total of 2602 turns with a mean value of 867.3 per learner group in the first unstructured convergent task. Similarly, they had 2775 turns in total with a mean value of 925 per learner group during the second unstructured convergent task. The number of TL turns was 2246 with a mean value of 748.7 per learner group in the first convergent task while there were 2566 TL turns with a mean value of 855.3 per learner group in the second unstructured convergent task.

The total number of turns taken during the structured tasks also indicated that the number of turns taken during the convergent tasks were higher than the divergent tasks. To clarify, during the first structured divergent task, learners engaged in 1413 turns in total with a mean value of 706.5 per learner group while they had a total of 781 turns with the mean value of 390.5 during the second structured divergent task. The TL turns differed a great deal between two sessions. There were 1197 TL turns in total during the first structured divergent task with the mean value of 598.5 per learner group. On the other hand, learners had 642 TL turns with the mean value of 321 during the second structured divergent task session.

During the first structured convergent task session, learners had a total of 1196 turns with a mean value of 598 while in the second structured convergent task session, they had 1179 turns with the mean value of 589.5. The number of TL turns was 936 with a mean value of 468 during the first structured convergent task session and it was 958 with a mean value of 479 during the second structured convergent task session.

In order to understand whether there was a task type effect on learners' engagement during the divergent and convergent tasks, the overall mean values of target language turns per tasks were computed. The results showed that there

was a task type effect on learners' engagement. For instance, the mean value of TL turns taken during the unstructured divergent tasks was 322.83 while it was 802 for the unstructured convergent tasks. In addition, the overall mean value of the TL turns for the structured divergent tasks was 459.75 which was relatively higher than the mean value of TL turns in unstructured divergent tasks. The overall mean value of the TL turns in structured convergent tasks was 473.5.

The results also indicated that the structuring of the groups had an impact on learners' engagement during the tasks. Although the mean difference of TL turns between divergent and convergent tasks in unstructured task sessions was very distintive, the mean difference between divergent and convergent tasks did not differ greatly in structured task sessions. These results suggest that structuring group work enabled learners to engage more in structured divergent tasks than unstructured divergent task. Similarly, learners seemed to engage in structured convergent tasks less than unstructured convergent tasks.

These results can be summarised as the learners had more turns during the convergent tasks when compared to the divergent tasks in both unstructured and structured task sessions. This suggests that learners showed more engagement during the convergent tasks than the divergent tasks. The structuring effect enabled learners to show the similar engagement during the divergent and convergent tasks. Additionally, learners engaged more in structured divergent tasks than unstructured divergent tasks.

Learners' production during the tasks. In order to examine the impact of task types on language production of the participants, the number of words was countedd as the unit of analysis. In the calculation of the words, all parts of speech were taken into account. This included nouns, verbs, adjectives, adverbs, pronouns, prepositions, conjunctions, determiners as well as exclamations. However, lexical tokens such as hesitation markers e.g. 'erm and err (or different representations)' were not included in the calculation of the words. However, the lexical token 'huh' (hı in Turkish) was included in the calculations when it signalled a clarification request. Also, the confirmation token 'hu huh' (hı hı in Turkish) was included in the calculation of the words.

The extract 2 was taken to show the process conducted for the quantification of the number of words throughout the whole data. This extract was taken from the first unstructured divergent task session of the second group.

Extract 2. What do you think about online dating?

First Unstructured Divergent Task- Group 2

ARZ:	when we go same course but (6 words)
TUG:	hı? (1 word)
ARZ:	we me- we go- we went to same course but err (9 words)
TUG:	in the a- (2 words)
ARZ:	we- (1 word)
TUG:	in the Azerbaijan (3 words)
ARZ:	yes (1 word)
TUG:	hı (1 word)
ARZ:	and err we never meet (4 words)
TUG:	and you didn't know each other (6 words)
ARZ:	y- no (1 word)
	((head shakes))
TUG:	so it's a good thing (5 words)
ARZ:	yes (1 word)
TUG:	you to you (3 words)

Only target language words were counted for the quantification of the number of words. Following this, the mean length of TL turns was calculated in order to compare the effect of task types on the complexity of learners' production. The table 10 below summarizes the number of TL words produced during each task session.

Table 10

Number of Words Produced per Session

Session types	Number of TL turns	Sum of TL words	Mean length of turns per group	Mean length of turns per task
Unstructured Divergent Task 1	981	5176	5.28	5.29
Unstructured Divergent Task 2	956	5065	5.30	
Unstructured Convergent Task 1	2246	8461	3.77	3.71
Unstructured Convergent Task 2	2566	9393	3.66	
Structured Divergent Task 1	1197	5272	4.40	4.65
Structured Divergent Task 2	642	3282	5.11	
Structured Convergent Task 1	936	4075	4.35	4.20
Structured Convergent Task 2	958	3876	4.04	

The results showed that learners produced 5176 TL words during the first unstructured divergent task session with a mean length of turn value of 5.28 per group. On the other hand, there were 5065 TL words produced in the second unstructured divergent task session a mean length of turn value of 5.30 per group. The mean values of interactional measurement indicated that the complexity of learners' language production was similar to each other in those tasks.

During the unstructured convergent tasks, there was an increase in the number of TL words produced by the learners. In the first unstructured convergent task session, the learners produced 8461 TL words with a mean length of turn value of 3.77 per group while they produced 9393 TL words during the second unstructured convergent task session a mean length of turn value of 3.66 per group. The mean difference between first and second unstructured convergent task session was also quite similar to one another.

The number of TL words that learners produced during the structured task sessions was also counted to see whether there was a change in the mean length of turns in those tasks. The results indicated that during the first structured divergent tasks, the learners produced 5272 TL words with a mean length of turn value of 4.40 per group. On the other hand, there were 3282 TL words produced with a mean length of turn value of 5.11 per group. During the structured convergent tasks, it was observed that learners produced 4075 TL words with a mean length of turn value of 4.35. On the other hand, during the second structured convergent task session, learners produced 3876 TL words with a mean length of turn value of 4.04 per group.

The mean scores suggest that learners produced longer turns in divergent tasks than convergent tasks. The overall mean values were calculated to provide more reliable evidence for the effect of task types on the complexity of learners' production. In this regard, the overall mean length of turn value for two unstructured divergent tasks was calculated as 5.29. On the other hand, the overall mean length of turn value for two unstructured convergent tasks was calculated as 3.71. In addition, the overall mean values were calculated for the structured tasks as well. The overall mean length of turn value of two structured divergent tasks was calculated to be 4.65. On the other hand, the overall mean length of turn value during structured convergent tasks was calculated to be 4.40.

These results showed that there was a task type effect on the complexity of learners' production of target language. The mean length of turn values indicated the number of words produced in a single turn. Therefore, it was observed that learners produced longer turns in divergent tasks than convergent tasks no matter whether they were assigned group roles or not. This difference was much more obvious in unstructured tasks. The mean length of turn values of structured divergent and convergent tasks did not show a big difference. Therefore, it can be hypothesized that having group roles enabled learners to produce longer turns in convergent tasks. Conversely, it caused to shorten the turns in structured divergent tasks.

These findings are in line with the results that Altay (2004) found in her study. Since divergent tasks carry the same features as discussion tasks, learners may take less but more extended turns during divergent tasks than convergent

tasks. The mean length of turn values of both unstructured and structured tasks support these findings. Moreover, learners try to find a single solution as a group during the convergent tasks. Therefore, it is highly likely to see shorter turns such as one word turn during convergent tasks. This causes to have more but shorter turns during the convergent tasks since the learners try to come to a single conclusion.

In sum, it was seen that there was a difference in learners' production of target language between divergent and convergent tasks. This was more obvious especially in unstructured task sessions. The learners produced fewer words, but longer turns in divergent tasks. Conversely, they produced more words, but shorter turns in convergent tasks. In addition, the assignment of group roles caused to have longer turns in structured convergent tasks.

What follows the results from quantitative analysis is the qualitative analysis of the data in order to find the collaborative behaviours that learners employed during task-based peer interactions.

Collaborative Behaviours Employed in Task-Based Peer Interactions

In this section of the findings, the results from the qualitative analysis will be reported. The qualitative analysis of the extracts showed that the students used a total of 13 different types of collaborative behaviours in L2 task-based interactions. Although there had not been an intention to group these behaviours together, it became evident that there were some similarities between some collaborative acts. Therefore, these behaviours were grouped into two different categories. These were language- related collaboration and task-related collaboration. Language-related collaboration types evolved around the language issues that emerged during the interactions. On the other hand, task-related collaboration types evolved around task related issues.

I will start with explaining language-related collaboration types. Each of the language-related collaborative behaviours will be defined and illustrated with examples from the current study.

Group 1: Language-related collaboration. There were 8 different language related collaborative behaviours employed by the learners in the current

study. These collaboration types were related to the resolution of any language issues such when learners struggled to find a word or corrected each other's utterances. These were observed to create opportunities for learning new language items in the emergent context. Language collaboration types also evolved around resolution of any comprehension problem between learners. This happened when the learners asked for a clarification or explanation from their peers. A list of language-related collaboration behaviours and their definitions for the present study are given in Table 11.

Table 11

Language-related Collaborative Behaviours Identified in the Study

1) Provision of the word/phrase	When the current speaker does not know or recall an L2 word, other learners may provide him/her with the L2 equivalent of the word. This is solicited by the current speaker in L1.
2) Reconstruction of others' turn	When the current speaker uses an incorrect word, other learners correct the speaker. When a learner produces incomplete or structurally incorrect utterance, his partners reformulate his utterance in a well-structured form.
3) Request for clarification	Learner(s) in the group interaction may elicit a clarification of what the speaker has just said. This is done either by repeating a word which the interlocutor has uttered or by using wh-type of questions. As a result of clarification requests, interlocutors reformulate the information previously given or bring new information to the interaction.
4) Comprehension check	The current speaker checks the understanding of his or her previous utterance by other learners in the group. This is done usually by using an explicit 'do you understand' question by the current speaker.

5) Summary of the others' turn	An interlocutor provides a summary of what has been previously uttered by another learner in the group. This is done without any solicitation from other learners. It serves the function of helping other interlocutors understand what the current has just uttered.
6) Request for explanation	An interlocutor may ask for an explanation on the previous speaker's utterance. This is typically done by using wh- type of questions.
7) Request for information	This refers to the instance when an interlocutor elicits the meaning of an L2 word, extra information or how to translate an utterance which is in L1 to L2. In the case of a lexical item, this collaborative behaviour is followed by a provision of L1 translation or L2 synonym or explanation with body language. Learners rarely use L2 to explain the meaning of the word.
8) Provision of the L1 translation of the word/ utterance	If the speaker uses a word or a phrase after checking from online dictionary, the speaker translates the word or the utterance in a quiet voice just after she/he finishes his/her utterance in L2. This is done usually without being solicited any request for information or clarification from the other learners.

These collaborative behaviours will be discussed first in accordance with the related definitions in the literature. A sample extract will be provided for each of the collaborative definitions from the present study to illustrate the collaborative behaviour found in the study. A comment on the extracts will also be provided to prove why such a particular moment was labelled as that type of collaborative behaviour.

Provision of the word/phrase. The first language-related collaborative behaviour identified in the data was the 'provision of the word/phrase'. This collaborative act was initiated in two ways by the learners. For example, when the current speaker struggled and could not complete his/her utterance, other learners

provided either the lexical item or the phrase to help him/her complete the utterance. This collaborative behaviour was similar to what was defined in the previous studies (Erten & Altay, 2009; Foster & Ohta, 2005; Kos, 2013; Sato & Viveros, 2016).

Erten & Altay (2009) named this collaborative turn as ‘completion’ and they defined it as a collaborative turn which involves providing words/phrases that learners could not find or completing their utterances. Kos (2013) found ‘co-construction’ as a form of peer assistance, which he adopted from Foster and Ohta’s (2005) study. He (2013, p.86) defined this assistance type as "the joint creation of an utterance, either one person completes the other’s utterance or more than one person chimes in to create an utterance" as in the same vein with Foster and Ohta (2005, p.420). Sato and Viveros (2016) identified a form of collaboration which they named as ‘collaborative sentence completion (CSC). The authors defined this collaboration type as occurring when a learner struggled to finish his utterance and another learner supplied the rest of the sentence.

In order to illustrate this collaborative behaviour in the present data, the following extract was taken from the first unstructured divergent task session of the third group. In this particular extract, the learners were discussing online dating.

Extract 3. What do you think about online dating?

First Unstructured Divergent Task- Group 3

1		ZUL:	I don't think yani online dating (1.0) not bad sometimes sometimes
			i mean
2			bad sometimes good it depends
3		SIM:	yes
4		OZN:	but in the real life err I said err online dating is more relax- şey err
			err
5			easier than real life for example in the online dating they err peoples are err
6	→		easily (1.0) some err
7	→	SIM:	communication with people
8	→	OZN:	communication yes (1.0) fa- fa- different different sentences (2.0)
			di- di-
9			that's some reliable sentences but in real life and they err meet in the park
10			or coffee err then they don't talk they play your their
11		SIM:	very [surprising

12 OZN: [phones they are playing their phones they not talk

13 SIM: yes

In line 4, OZN took the turn after SIM's confirmation of ZUL's turn in line 1. Through the end of his turn in line 6, he uttered a hesitation marker (err) announcing that he was having trouble with completing his utterance. He also hinted that he was having problem with finding the word before this particular moment by another hesitation marker (err) and pause (1.0). In line 7, his partner, SIM, provided a phrase (communication with people) and helped him complete his utterance. Her provision was accepted by OZN in line 8 by repeating the part of SIM's contribution (communication) and using a confirmation response (yes).

This collaborative behaviour also occurred when learners searched for the L2 equivalents of the words which they did not know or recall in the present study. The current speaker solicited the L2 equivalent of the word by asking other interlocutors using the first language.

This behaviour was found to carry similarities to what Sato and Viveros (2016) categorized as language- related collaboration (LRC). The authors stated that LRC was operationally similar to what Swain and Lapkin (1998) and Swain (2006) referred as language-related episodes (LREs), which was defined as "any part of dialogue where the students talk about the language use". Different from Swain and Lapkin's (2002) conceptualisation of LREs which also included private speech, Sato and Viveros (2016) focused only on the exchanges between learners. Moreover, Swain and Lapkin (2002) distinguished between lexis-based and form-based LREs. The authors defined lexis-based LREs (or lexical LREs, i.e. Storch, 2008) as occurring when learners search for vocabulary items. The distinction of this collaborative behaviour found in the present study is that there is an explicit solicitation in L1 by the current speaker for a particular lexical item. It also resembles word search sequences.

The following extract was taken from the first unstructured divergent task session of the first group during which the students were talking about online dating. At this particular moment, they were discussing meeting people on the social platform.

Extract 4. What do you think about online dating?

First Unstructured Divergent Task- Group 1

1		MEV:	it's maybe err good idea because
2		OKN:	why↑
3		MEV:	because
4		OKN	why
5	→	MEV:	I am a man and some- somebody facebooka eklemek ne acaba *how can I say 'add person on facebook*
6	→	BER:	add
7	→	SEY:	add
8	→	MEV:	add
9	→	SEY:	add the friends
10	→	MEV:	add the friends °to me°
11		ALL:	((laugh))
12	→	MEV:	it maybe want to- want to tanışmak neydi *how can I say 'meet'*
13	→	OKN:	meet
14	→	MEV:	huh meet meet me and maybe he can be good person and I
15			improve myself with talking with everybody thinks

In the extract 4, starting from the 1st line, MEV was explaining his ideas about online dating until he solicited the translation of the phrase (facebooka eklemek ne acaba) in line 5 by using their native language. Two learners in the group (SEY and BER) provided a part of phrase (add) in lines 6 and 7. MEV repeated the word (add) in line 8. The next turn SEY provided the complete translation (add the friends) of what MEV solicited in line 5. Although her provision was not an exact translation, MEV accepted her provision by echoing (add the friends °to me°) and expanded the phrase in line 10. This provision from his partners helped MEV continue his speech. He pursued his turn in line 12 and initiated another word search sequence. MEV solicited the meaning of a word (tanışmak neydi) in line 12 by using L1. Different from the previous learners in lines 6 and 7, a new partner, OKN, provided the word in L2 (meet) in line 13. MEV indicated that OKN's provision was accepted by using change of state token (huh) and he echoed twice (meet meet).

Reconstruction of others' turn. The next collaborative behaviour was 'reconstruction of others' turn'. Reconstructions appeared to take place either in the form of a correction of a single word or reformulating the partner's word or a phrase to create a more clear meaning. Learners' self-corrections were not included in this collaborative turn. The focus was only on the instances during which the learners were engaging with each other.

'Other-correction' that was found in other studies (Foster & Ohta, 2005; Kos, 2013) showed resemblance to this collaborative turn. Foster and Ohta (2005) provided other-correction as a form of assistance and defined as a peer correcting his partner (p.420). Kos (2013), by referring to Foster and Ohta's (2005) study, provided other-correction as one of the types of assistance peers provided to each other.

The extract 5 was taken from the first unstructured divergent task session of the second group in which a learner corrected his partner's incorrect conjugation of a verb. The learners were talking about the online dating during their discussion.

Extract 5. What do you think about online dating?

Unstructured Divergent Task 1- Group 2

1		ARZ:	err and (2.0) er we- ((laugh)) we meet err we never meet
2			°hiç bir zaman görüş[medik°
			we have never met
3		BUR:	you never met
4		TUG:	you err never- you have never-
5	→	ARZ:	never meet
6	→	TUG:	MET
7	→	ARZ:	met
8		TUG:	yes this is ((laughs and turns to BUR))
9		BUR:	((laughs))

The learner, ARZ, was telling other learners that she had a boyfriend whom she met online. In line 1, she was telling that she had never met her boyfriend in person. However, she could not form the sentence in the correct tense and aspect. She provided L1 translation (°hiç bir zaman görüş[medik°) of what she was trying to

explain in line 2. In line 3, BUR translated what ARZ provided in L2 (you never met). After this particular moment, TUG participated in the conversation and started a turn by translating (you err never- you have never-) of line 2. In line 5, ARZ accepted this by echoing (never meet) but she again used the incorrect conjugation version of the verb. In line 6, TUG corrected ARZ's incorrect usage with a higher volume (MET). The next turn in line 7, ARZ used the correct form of the verb (met).

This collaborative turn was also observed in the form of a reformulation of an incorrect utterance. When a learner produced an incomplete or structurally incorrect utterance, his/her partners reformulated his utterance in a well-structured form. The following example was taken from the second unstructured convergent task session of the first group. The learners were asked to decide on a holiday destination for the weekend with a limited budget.

Extract 6. Deciding on a holiday destination for the weekend with a limited budget

Unstructured Convergent Task 2- Group 1

1	MEV:	hey guys what will we go
2	MER:	maybe
3	MEV:	where will we go together
4	MER:	err i think we can go to hatay
5	OKN:	hatay?
6	MER:	yeah
7	MEV:	hatay?
8	MER:	hatay is very natural and very beautiful place
9	OKN:	very dangerous
10 →	MER:	ne- what dangerous?
		what
11 →	MEV:	syria
12 →	OKN:	it between [$suriye$]
		syria
13	MER:	[yeah] ((laugh)) but err in dörtyol err doesnt near the err
14	syria it's err near the adana	
15	MEV:	but hatay is the near the [suriye]
16	OKN:	[suriye] i agree with you

In this particular extract, MEV initiated the conversation and asked his partners' ideas on a possible destination for their holiday in lines 1 and 3. MER offered to go to Hatay which is situated in the south part of Turkey and near the border of Syria (err i think we can go to hatay). In line 5, OKN asked a clarification (hatay?) and MER gave a minimal response token to his clarification (yeah). MEV also requested a clarification by echoing OKN's previous turn (hatay?). In line 8, MER provided the reasons of choosing Hatay for a possible holiday destination (hatay is very natural and very beautiful place). In line 9, OKN had another turn (very dangerous) and upon his turn, MER requested a clarification in line 10 (ne- what dangerous?). MEV self-selected himself as the next speaker in line 11 and referred to hatay's geographical position (syria). In line 12, OKN reformulated MEV's one word utterance (it between [$suriye$]) and it is seen that this was understood by MER in line 13 by her use of confirmation token (yeah) accompanied by laugh. MER then provided counter arguments in lines 13 and 14 to MEV's and OKN's ideas.

In this particular extract, OKN's turn in line 12 was also regarded as reconstruction since OKN reformulated MEV's turn in 11 although there was not an incorrect usage of the language. Rather, OKN reconstructed MEV's utterance to make the meaning clearer.

The following extract also represents how reconstructions were constructed for a sentence. In the task, the learners were talking about online dating and in this particular moment BUR was asking ARD questions about the social media.

Extract 7. What do you think about online dating?

First Unstructured Divergent Task- Group 2

1		BUR:	[are you] chatting
2		ARZ:	but
3	→	BUR:	are you chatting someone not face to face
4		ARD:	hı yes
5	→	TUG:	do you ha- do you use err social media?
6		ARD:	always i always chatting but err i yani my friends *i mean*
7		TUG:	yes
8		ARD:	with my friends

9		(2.0)
10	TUG:	not a err stranger one
11	ARD:	yes [I do]n't prefer

BUR initiated the conversation by asking questions to ARD in lines 1 and 3 (are you chatting someone not face to face). BUR's question in line 3 was not in structurally correct form. Although ARD answered her question in line 4 (hı yes), TUG reformulated BUR's incorrect question in line 5 (do you ha- do you use err social media?). This particular moment was regarded as a collaborative behaviour since it provided a proper use of the question. It was also labelled as reconstruction since TUG changed the whole structure of BUR's question, but the inherent meanings of both questions remained the same.

Request for clarification. The third language-related collaborative behaviour was the 'request for clarification'. It was observed when other learner(s) elicited a clarification of what the current speaker just said. This was done either by repeating some part of the previous utterance or by using wh-type of questions. Clarification requests let speakers reformulate the information previously given or bring new information to the interaction.

In the available research, we can see Beatty and Nunan (2004), Erten and Altay (2009), Foster and Ohta (2005) and Gillies (2006) referring to this type of collaborative strategy. In their study, Beatty and Nunan (2004) defined some collaborative discourse strategies and 'request for clarification' found in the present study was a combination of what Beatty and Nunan (2004) labelled as 'explain text / task/ ideas' and 'solicit clarification'. According to the researchers, the former strategy creates opportunities for negotiation of meaning and common understanding while solicit clarification helps negotiate meaning through request for additional information. Both of these collaborative strategies were reflected in what was found to be request for clarification in the present data. Similarly, Erten and Altay (2009) found a collaborative turn which they named as 'clarification' in their study. According to the researchers, clarification involved clarifying or extending opinions or suggestions made by peers and clarifications offered by other partners. Foster and Ohta (2005) explained clarification requests and confirmation checks in the case of negotiation of meaning instances. Request for clarification in this study seemed to be a combination of what Foster and Ohta

(2005) defined as confirmation checks and clarification requests. According to the researchers, any expression by the people immediately following the speaker's utterance to elicit confirmation whether the utterance had been correctly understood was categorised as confirmation checks. While requesting a confirmation check, the whole or part of the previous utterance is repeated and the speaker provides a single confirmation such as 'yes'. On the other hand, the researchers define clarification requests as any expression used to elicit clarification of the speaker's previous utterance by asking questions. Lastly, this behaviour carries similar features to what was defined as elaborations in Gillies' (2006) study, which was also mentioned in Erten and Altay (2009). Elaborations involved extending other students' responses though this strategy seems to resemble the collaborative behaviours such as request for explanation or information which will be described in the next sections.

The extract 8 was taken from the second unstructured convergent task session of the first group. The learners were trying to find a holiday destination for the weekend with a limited budget.

Extract 8. Deciding on a holiday destination for the weekend with a limited budget

Second Unstructured Convergent Task- Group 1

1		MER:	[but we err we have to err go near the sea i think because we-
2		MEV:	i- i- i dont
3		MER:	i- i want to
4		MEV:	i dont like [sea]
5		MER:	[swim]
6		MEV:	i dont like [swim]
7		MER:	[but i] like [i like]
8		OKN:	[ıyyy]
9		MER:	swim people like swim
10	→	OKN:	you dont like swim
11	→	MEV:	yes beca- because i am a blonde blonde hair err and my body
12	→		is very err
13		OKN:	white [body
14		MEV:	[hassas sensitive
			sensitive

15 OKN: [white man]
16 MER: [you must] swim in err night maybe [evening or]
17 MEV: [but if if] if i see the s- sea
18 MER: yeah
19 MEV: err i-i want to swim at in in the sea [i dont]
20 OKN: [okay]
21 → MER: oh:: i dont understand what?
22 MEV: look
23 OKN: err
24 MEV: if i s- if i saw if i see
25 MER: yeap sea [see the sea
26 MEV: [the sea:: [ye::s
27 MER: [ye:s: ((laugh))
28 MEV: i i want to swim in the sea
29 MER: yeah me too
30 MEV: but-
31 OKN: ((smile))
32 MEV: but my body is very err sensitive
33 MER: you dont obliged to err under the err *güneş neydi lan* ((laugh))
34 OKN: sun
35 BER: sun
36 MEV: sun
37 MER: sun ((laugh)) $under the sun$
38 MEV: yes

In extract 8, there were examples of imitation of both clarification requests. MER announced that she preferred to have a seaside holiday in line 1 ([but we err we have to err go near the sea i think because we-). However, her suggestion was not accepted by MEV and started to provide reasons in lines 2 (i- i- i dont), 4 (i dont like [sea]) and 6 (i dont like [swim]). In line 10, OKN requested a clarification by changing the structured of MEV's previous utterance (you dont like swim). MEV responded to OKN's request with a confirmation (yes) in lines 11 and 12 and expanded his turn by providing more information about why he did not like swimming in lines 11, 12, 17 and 19. MER provided a candidate answer in line 16 ([you must] swim in err night maybe [evening or]) but her contribution was not accepted by MEV and he continued holding the floor in line 17 ([but if if] if i see the

s- sea). MER gave a go ahead response (yeah) in line 18 and MEV held the floor in line 19. OKN showed his understanding of MEV's previous turns ([okay]) by overlapping at the end of MEV's turn. However, in line 21, MER claimed her non-understanding explicitly (oh:: i dont understand) and she requested a clarification by using a wh- question (what?). Starting from the line 22, MEV started to explain his previous utterances and took subsequent turns with MER. The minimal tokens of MER in lines 25 (yeap), 27 (ye:s:) and 29 (yeah) showed that MER understood MEV's explanation. Moreover, in line 33, she initiated a new turn constructional unit (you dont obliged to err under the err *güneş neydi lan*). This suggests that the comprehension problem was resolved by providing clarification and then the learners were able to pursue their discussion.

Comprehension check. Another language-related collaborative was named as 'comprehension check' in the current study. This collaborative action usually started when the current speaker used an expression to understand whether his or her previous utterance had been understood by the other learners in the group. This was done usually by using explicitly 'do you understand' formulations by the current speaker. When the speaker received a negative response, she/he divided the previous sentence into smaller parts and also slowed his/her speech.

Foster and Ohta (2005) classified comprehension checks as one of the negotiation of meaning strategies. The authors (2005, p.410) defined comprehension checks as "any expression designed whether that speaker's previous utterance had been understood by the interlocutor". The function of collaborative behaviour defined as comprehension check in the present study was similar to Foster and Ohta's explanation.

The extract 9 below was taken from the first unstructured task session of the first group during which the learners were discussing the online dating.

Extract 9. What do you think about online dating?

First Unstructured Divergent Task- Group 1

1	→	OKN:	some people use website or social network but they don't know
2	→		how to use it i think it's terrible ((smile)) i think
3		MEV:	okay

4	→	OKN:	do you understand me
5		MEV:	no
6		OKN:	i said some people
7		MEV:	yes
8		OKN:	use website or social network
9		MEV:	okay
10		OKN:	but they don't know how to use it they don't know how to use social
11			network or website
12		MEV:	okay
13		OKN:	i think it is terrible ((smiles))
14		MEV:	okay
			((they move to another topic))

In this particular interaction, OKN provided his opinion on online dating in lines 1 and 2. His contribution was accepted by MEV in line 3 (okay), but the next turn, OKN checked others' comprehension of his previous utterance (do you understand me). Although MEV previously accepted OKN's contribution in line 3, he gave a negative response (no) in line 5. OKN divided his extended turn into small parts in lines 6, 8, 10, 11 and 13. MEV provided a positive response to what OKN provided in each turn along the lines 7(yes), 9(okay), 12(okay) and 14(okay). After this particular instance, they moved to another topic. This indicated that OKN's use of comprehension check created a collaborative moment in that OKN and MEV participated jointly in the resolution of comprehension problem.

Summary of the others' turn. Another type of language-related collaborative behaviour was defined as 'summary of the others' turn'. This act was observed when an interlocutor provided a summary of what had been previously told by the previous speaker. It was observed to carry the function of making other learners in the group understand what the previous speaker had previously uttered. The following extract 10 illustrates how a summary was enacted by a particular learner in the group. The extract was taken from the first unstructured divergent task of the second group during which learners were talking about online dating.

Extract 10. What do you think about online dating?

First Unstructured Divergent Task- Group 2

1	→	ARZ:	[but] he know err my facebook or instagram login and I know
2	→		him the login °facebook and instagram login (yani)°
			i mean
3		BUR:	I don't hear
4	→	TUG:	şey his er her girl- her boyfriend
			err
5		ALL:	((laugh))
6		ARZ:	$my girl$-
7	→	TUG:	knows his err passwords [didn't he?
8		ARZ:	[her passwords
9	→	TUG:	senin err hers passwords so
			your
10		ARZ:	and I know too
11	→	TUG:	hı
12		ARZ:	[his]
13	→	TUG:	[and] arzu knows
14		ARZ:	password
15	→	TUG:	her boyfriend's passwords
16		BUR:	heh yes

ARZ was telling others in the group that her boyfriend knew her passwords and vice versa in lines 1 and 2. BUR claimed that she did not hear ARZ's previous utterances in line 3 (I don't hear). In line 4, TUG self-selected himself as the next speaker and started to summarise ARZ's previous utterances (şey his er her girl- her boyfriend). TUG pursued this collaborative act through the lines 7, 9, 11, 13 and 15 by exchanging information with ARZ. For example, in line 7, TUG used a confirmation check (knows his err passwords [didn't he?), but he did not get a proper response to his question by ARZ in line 8 ([her passwords). He continued his turn in line 9 (senin err hers passwords so) and ARZ added a new contribution to TUG's turn in line 10 (and I know too). This was accepted by TUG (hı) in line 11 and he summarised the rest of ARZ's contribution. This collaborative act was managed by ARZ and TUG together. I was successful because in line 16, BUR confirmed her understanding of the previous turns with a positive response token (heh yes).

Request for explanation. The other type of collaborative behaviour was named as 'request for explanation'. This collaborative behaviour was initiated when a partner asked for an explanation of the previous speaker's utterance. This was typically done by using wh- type of questions. This kind of collaborative behaviour was similar to what was also named as 'request for explanation' in Kos (2013). He defined this behaviour as an assistance seeking strategy and explained that it initiated a request such as explanations or opinions from a partner. This collaborative behaviour was found to be similar to Gillies' (2006) categorisation of 'elaborations', which helped providing solicited explanations and open type questions.

The extract 11 below was taken from the second structured divergent task session of the first group during which the learners were discussing the ideal age for marriage.

Extract 11. What is the best age for marriage?

Second Structured Divergent Task- Group 2

1		BUR:	i think err:: (0.5) best age for married (0.5) twenty seven
2			(0.9)
3		MER:	wh-
4		MEV:	((tsch))
			+surprised face
5	→	MER:	why?
6	→	BUR:	because usually (0.8) err (0.5) our (0.2) finish the err (0.6)
7	→		university (0.5) usually (0.4) and we err (0.5) start the (0.2)
8	→		work and (0.7) maybe one and (0.2) two years err we (0.7)
9	→		work
10	→		(0.3)
11		MER:	y[es:]
12	→	BUR:	[and] after that (0.6) i think err twenty seven err or (0.8) err
13	→		(1.8) twenty seven and err thirty five (0.2) err[::]
			+((hand gesture))
			+MER shocked face
14		MEV:	[be]tween
15		BUR:	[yeah]
16		MER:	[oh::] my god

17 MEV: between this [age]

BUR initiated the conversation and stated her opinion in line 1 (i think err:: (0.5) best age for married (0.5) twenty seven). Both MER (wh-) and MEV ((tsch)) showed surprise by her opinion in the subsequent turns. In line 4, MER requested an explanation (why?) by using a wh-question. Upon MER's request for explanation, BUR explained her ideas in an extended turn between the lines 6 and 13.

Request for information. The next collaborative behaviour was found to be 'request for information'. This collaborative behaviour was similar to what Kos (2013) named as a request for information, which he originally adapted from Storch's (2001a) study. Kos (2013) classified request for information as another strategy of seeking assistance which helped elicit lexis, morphosyntax or spelling. In the present study, similarly, this collaborative move was initiated when a learner elicited the meaning of an L2 word, extra information or L2 translation of an utterance. In the case of a lexical item, this collaborative behaviour was followed by translation to L1, provision L2 synonym or explanation with body language. Rarely, the learners used L2 to explain the meaning of the word. The extract 12 below illustrates how this collaborative behaviour was initiated and resolved. This extract was taken from the second unstructured convergent task session of the first group. The learners were planning a holiday with a limited budget.

Extract 12. Deciding on a holiday destination for the weekend with a limited budget

Second Unstructured Convergent Task- Group 1

1 BER: and cacabey err mosque is err the first err (opoze)
2 MEV: cacabey?
3 BER: cacabey
4 OKN: mosque ((laugh))
5 MEV: I never err hear that
6 → BER: err in kirsehir cacabey mosque
7 MEV: yes
8 → BER: is the first
9 OKN: mosque

10		ALL:	((laugh))
11		MEV:	is the first
12	→	BER:	err observatory
13	→	MER:	what is mean?
14	→	BER:	°gözlemevi°
			observatory
15	→	MER:	gözlemevi
			observatory
16	→	MEV:	gözlemevi he::
			observatory
17	→	BER:	is the first observatory [in the world]
18		OKN:	[gözleme house]
			wrap house
19		MER:	yeah:: [I interes]ted
20		MEV:	[gözlemevi
			observatory
21		MER:	in astronomy
22		OKN:	gözlem
			observation
23		BER:	yes
24		MEV:	astronomy
25		OKN:	he::
26		MEV:	is really wonderful we can go cacabey
27		MER:	((laugh))
28		MEV:	mosque it s really good idea and
			3 lines deleted
29		MEV:	and err kirsehir is the err near nearby yakın buraya
			nearby
30		MER:	yani
			yes
31		BER:	yes

Before this particular moment, the learners discussed that they could go to Kırşehir, which is a city of Turkey. They also discussed what they could do in Kırşehir. BER told his partners that they could visit a famous architecture (Cacabey Mosque) in Kırşehir and he provided information about this architecture

in line 1. At the end of this line, he used a word (opoze) which was incorrect and unknown to the other learners. In line 5, MEV claimed that he had not heard about the structure before (I never err hear that). In line 6, BER initiated the turn with the same sentence and in line 12, he used the correct word (observatory). MER asked for information (what is mean?) in line 13 and BER provided the L1 translation in line 14 in a quitter voice (°gözlemevi°). MEV repeated the word in L1 and showed his understanding in line 16 (he::). After the resolution of this request, BER continued his turn in line 17 by expanding his previous information (is the first observatory [in the world]).

The following extract 13 was taken from second unstructured convergent task session of the second group. The learners were trying to find a holiday destination with a limited budget.

Extract 13. Deciding on a holiday destination for the weekend with a limited budget

Second Unstructured Convergent Task- Group 2

1		TUG:	okay lets write to abroad
2	→	SEH:	abroad↑
3	→	TUG:	hı another country from your own country
4		BUR:	hı

TUG offered a suggestion to go to abroad in line 1(okay lets write to abroad). SEY hinted that he did not know the meaning of the word (abroad↑) and asked for its meaning by repeating the word with a rising intonation in line 2. In line 3, TUG showed that he understood SEH's request for information (hı) and then explained the meaning of abroad in L2 (another country from your own country). TUG's explanation was successful because in line 4, BUR used a change of token (hı) which indicated her understanding of the explanation.

This particular moment was marked as request for information rather than a clarification request because the response turn did not have a confirmation response such as 'yes'. This is what differentiates request for information from clarification request although first pair part in both collaborative behaviours may repeat the word or part of the utterance to solicit help.

The following extract was chosen to show a particular learner's (TUG) provision of L2 synonym for an unknown word when his partner elicited the meaning of the word. It was taken from the first structured divergent task session of the first group during which the learners were discussing cheating.

Extract 14. What is cheating?

First Structured Divergent Task- Group 1

1		TUG:	[it says] err:: (1.2) we:: err (0.4) we have a (0.7)
2			justi[ce do you know justice]
3	→	BUR:	[what mean fairness]::
4			(1.1)
5		TUG:	do [you]
6		BUR:	[piş]t
			hey
7	→	TUG:	fairness is justice
8			(0.3)
9	→	BUR:	justice?
10			(0.4)
11	→	TUG:	justice
12	→		(0.3)
13	→	BUR:	what means?
14	→	TUG:	justice league batman superman ((holding his hand upwards))
15			(1.1)
16	→	BER:	°adalet°
			+TUG smiles
			justice
17			(1.6)
18	→	TUG:	they dont know anything i- i dont wanna play (1.4) ju- °adalet°
			justice

In this particular moment, the learners passed to a sub-question of the task (Are people born with a sense of fairness?). In lines 1 and 2, TUG simplified the task by changing the original words of the task with more common synonyms. For example, he provided justice for the equivalent of fairness in line 2. His turn in line 2 was overlapped by BUR's question of the meaning of justice in line 3 ([what mean fairness]::). She waited for an explanation (1.1) in line 4 and TUG started to repeat his previous utterance in line 2 (do [you]). BUR had another overlap with TUG's

turn and she used an explicit exclamation marker (hey) to ask TUG to explain the meaning of the word. In line 7, TUG provided the synonym of the word in a sentence (fairness is justice). However, the synonym of the word was also unknown for BUR. In line 9, she repeated the word with a rising intonation (justice?). Her request was not understood by TUG in line 11 as he only repeated the word (justice). In line 13, BUR formulated a wh- question (what means?) in order to elicit the meaning of the word. In line 14, TUG exemplified the word with a famous (justice league batman superman), but his explanation was not successful again because there was a silence (1.1) in line 15. Finally, in line 16, BER provided the L1 translation of the word in a softer voice (°adalet°). BER's translation was followed by TUG's turn and he also provided the L1 translation of the word in line 18 (°adalet°).

***Provision of the L1 translation of the word/utterance*.** The last language-related collaborative behaviour was found to be 'provision of the L1 translation of the word/utterance'. This collaborative behaviour was usually observed when the current speaker used a word or a phrase after checking the online dictionary. The speaker provided the word or the utterance in a quiet voice in L1 just after she/he finished her/his utterance in L2. This was initiated by the speaker without getting any request for information or clarification from the other learners.

The following extract was taken from the second unstructured convergent task of the first group. The learners were talking about the ideal age for marriage. In this particular moment, MER was explaining that 21 was the ideal age for marriage due to the fertility.

Extract 15. What is the best age for marriage?

Second Structured Divergent Task- Group 1

1		MER:	[i- i think] <u>we::</u> err (0.3) marriage err (0.3) twenty:: (0.3) especially
2			(0.9) twenty or twenty one years because err
3			(0.6)
4		SEH:	twenty
			((questioning face))
5	→	MER:	err (0.4) (tsch) we err (1.6) we are the (faintful) (1.0) °verimli°
			fertile

6 → ((hand gesture))
7 → ALL: ((laughter))
8 → MER: $most (0.5) (faintful)$ age
9 → SEH: [he]
oh
10 → MER: [and] err if you want to err (esmort) children ((laugh))
11 BUR: yeah

MER initiated the turn and explained her opinions about what the ideal age for marriage was in lines 1 and 2. SEH requested a clarification by repeating the part of MER's sentence in line 4 (twenty) accompanied by a questioning face. In line 5, MER she used an L2 word (faintful) which was incomprehensible and incorrect. After one second silence in the same line, she provided the L1 translation of the word (°verimli°), accompanied with a body language in line 6 without any request for clarification or information from her partners. MER repeated the same word ($most (0.5) (faintful)$ age) to define the age in line 8. Although the reason why she employed such behaviour was not clear, it was clear that it helped the other learners understand what she meant. In line 9, SEH gave a change of state token (he). In line 11, BUR also showed her understanding of MER's previous utterance (yeah).

This provision helped the interlocutors understand what the current speaker was talking about. The speaker either continued her/his talk or other learners provided help with the construction of the utterance. In the extract 16, the learners in the group were discussing the same task.

Extract 16. What is the best age for marriage?

Second Structured Divergent Task- Group 2

1 ZUL: older sister married now married err two years ago
2 ARD: err how old are-
3 ZUL: she
4 ARD: she↓ is she
5 ZUL: that is she err she was twenty four or twenty five
6 ARD: hı:::↓
7 ZUL: years old

8 ARD: normal

9 → ZUL: normal but err she studied ya da işte okudu

or studied

10 → SIM: educated

11 → ARD: hı yes

12 → ZUL: she is educated medicine and then

13 → KAN: graduated from

14 → ZUL: graduated

15 → SIM: hı graduated

16 → ZUL: from twenty five

In this extract, ZUL was providing an example from her own sister who got married at the age of 24 between the lines 1 and 8. In line 9, she started to explain her sister's profession. Although she formed a correct sentence structure and used a correct word (normal but err she studied), she provided L1 translation of what she just used (ya da işte okudu). In line 10, SIM offered a new word (educated) and it was confirmed by ARD in line 11 (hı yes). ZUL accepted the word and used in the sentence in line 12 (she is educated medicine and then). KAN also offered a new phrase (graduated from) in line 13. It was also accepted by ZUL and she repeated the word in line 14 (graduated). KAN's suggestion was also accepted by SIM in line 15 (hı graduated).

This part presented the 8 language-related collaborative behaviours employed in the current study. The definitions of each of them were provided and supported with the examples from the present study. Next part will present the task-related collaborative behaviours that were also employed by the learners.

Group 2: Task-related collaboration. Under this category, there were 5 collaborative behaviours that learners employed during their interactions. These behaviours differed from the language- related collaboration types since they evolved around task-related issues such as keeping learners on task, simplifying the task, management the discussion in L2. A list of task-related collaborative behaviours and their definitions for the present study are given in Table 12.

Table 12

Task-related Collaborative Behaviours Identified in the Current Study

1) Pooling knowledge / ideas	When the current speaker finishes his/her utterance, other learners may sometimes expand his/her idea by adding more information to what he/she has previously provided.
2) Encouragement for participation	A partner in the group may encourage the current speaker to relax or to continue his/her speech or to participate in the conversation. This is done when a learner may refrain from taking turns during the discussions due to the fact that she uses an incorrect word or she/he claims she/he cannot find any idea regarding the task. In addition, a speaker sometimes interrupts his/her partner's speech who takes less turns than other learners in the group. In these cases, There is sometimes an explicit exclamation such as 'X is speaking'.
3) Task policing	When a learner starts to talk about something irrelevant to the task, other learners in the group may direct the speaker to turn to the task. This can be done by elaborating on the roles.
4) Simplification of the task	When a learner does not understand what is required to do in the task, she/he may ask for an explanation. The partners either explain in L2 by simplifying the words or by translating into first language.
5) Language policing	When a learner uses L1 during the interactions, her/his partners may warn her to use L2.

Pooling knowledge/ideas. The first task-related collaborative behaviour observed in this category was 'pooling knowledge/ideas'. It was observed that when the current speaker finished his/her utterance, other learners expanded his/her idea by adding more information to what he/she had previously given. The reason of having such behaviour might be the nature of collaborative group work. The learners worked together and pooled their knowledge. The following examples better illustrate how this behaviour was enacted by the learners. The extract 17 was taken from the first unstructured task session of the first group.

Extract 17. What do you think about online dating?

First Unstructured Divergent Task- Group 1

1		MEV:	okay guys what do you think about °okay° first of all i never trust the
2			social networking because there are a lot of liar people in the:
3			internet and i:- i don't speak with someone f:acebook or err twitter
4			maybe↑
5	→	SEY:	°instagram° ((smiles))
6	→	MEV:	instagram or-
7	→	OKN:	or snapchat

In line 1, MEV initiated the discussion by asking other learners, but he pursued the turn to explain his ideas. Between the lines 2 and 4, he said that he did not talk to anyone in online websites such as facebook or twitter. In line 5, SEY contributed to his explanation by adding another online website (°instagram°). SEY's contribution was accepted in line 5 and repeated by MEV in line 5 with a normal voice (instagram or-). In line 6, OKN also offered another social media (or snapchat).

This particular moment was marked as a collaborative turn because learners expanded one learner's (MEV) contributions by adding new information. Since the learners did not evolve around solving a language-related issue or the management of the task, these particular moments were labelled as a separate collaborative behaviour.

The extract 18 below was taken from the second unstructured convergent task session of the second group during which learners were trying to decide on a holiday destination.

Extract 18. Deciding on a holiday destination for the weekend with a limited budget

Second Unstructured Convergent Task- Group 1

1		MEV:	we are err four or err
2		MER:	five
3		MEV:	five person
4		OKN:	i think enough
5		MEV:	err
6	→	MER:	we pay money for err travelling

7 → MEV: yes
8 → MER: and for living
9 → MEV: and
10 → MER: in the air
11 → MEV: go go and return
12 → MER: yes (XXX) yes
13 → MEV: it's really [err
14 → MER: [and
15 → MEV: expensive
16 → MER: nourishments for our nourishment

Before this particular instance, OKN suggested going to Antalya, which is one of the famous holiday destination in Turkey and MEV did not accept his suggestion and referred to the limited budget they had. In lines 1 and 3, MEV started to mention the number of people that the whole budget should cover. In line 4, OKN responded to his turn (i think enough) and hinted that they had enough money for a possible holiday in Antalya. However, in line 6, MER started to list for what they would spend their money (we pay money for err travelling). MEV accepted MER's turn in line 7 (yes). MER pursued the list in line 8 (and for living). Starting from the line 9, MER and MEV constructed the ideas together. This was clear since each learner's contribution was taken by the previous speaker by using agreement tokens (yes). By pooling their ideas collaboratively, MER and MEV provided a rationale for not accepting OKN's suggestion.

Encouragement for participation. The second task-related collaboration is 'encouragement for participation'. This collaborative behaviour was observed when an interlocutor refrained from taking turns during the discussions due to the usage of an incorrect word or the claim that they could not find any idea regarding the task.

In addition, a learner sometimes interrupted his/her partner's speech who took less turns when compared to the other learners in the group. In this case, a third interlocutor in the group encouraged the current speaker to relax and to continue his/her speech. This was sometimes done by using an explicit announcement such as 'X is speaking'.

This collaborative behaviour carried similarities to what was provided in the related literature. For example, this strategy resembles to what Beatty and Nunan (2004) suggested as 'direct attention', 'solicit suggestions/support' and 'signal interest in / show support for other's ideas'. The authors defined 'direct attention' as involving the partner in what is done. On the other hand, 'solicit suggestions / support' was defined as directly asking for partner's involvement. In the present study, however, there was not always a direct and explicit request to invite partners in the discussion. The learners showed an interest in the current speaker's speech by hinting an indirect request for participation in the conversation. Lastly, 'signal interest in / show support for other's ideas' was defined as the help to indicate a common direction in what learners are doing or discussing. In addition, Danli (2011) defined seven possible kinds of scaffolding functions, and the collaborative behaviour in the present study was similar to 'frustration control' and 'recruitment' defined in Danli's study (2011). The author defined 'frustration control' as helping control frustration and reducing stress while 'recruitment' involved drawing learners' attention to the task and engaging their interest in the task. Foster and Ohta (2005) and Kos (2013) provided 'continuer' as an instance in which a partner takes interest in the speaker' talk and encourages him to continue. Foster and Ohta (2005) discussed 'continuers' with reference to confirmation checks, but in the present study, encouragement was not provided as a response to confirmation checks.

There were three examples below to illustrate how this collaborative behaviour was enacted by the learners during the conversation. The following example was taken from the first unstructured divergent task session of the first group.

Extract 19. What do you think about online dating?

First Unstructured Divergent Task- Group 1

1		BAH:	err i agree with you
2		OKN:	yes of course
3	→	BAH:	because you trust that know someone yo yanlış °söyledim° *no i made a mistake*
4		OKN:	what is you↑
5	→	MEV:	be relax ((clasps his hands)) °continue°

6 BAH: °yanlış söyledim kuramıyorum şu an başkası (XXX)°
i made a mistake i cannot form a sentence now please someone else (XXX)
7 MEV: okay are you ready↑ ((orients to BER))

In this particular moment, BAH initiated the turn to show an agreement with the previous speaker (err i agree with you) in line 1. She continued providing her opinion in line 3 (because you trust that know someone). She announced that she made a mistake at the end of the same line (yo yanlış °söyledim°). In line 4, OKN requested a clarification (what is you↑), but this was not responded by BAH. In line 4, MEV advised BAH to be relaxed (be relax) and encouraged her to continue (°continue°). In line 6, BAH again announced that she made a mistake (°yanlış söyledim) and she further claimed that she could not form a sentence (kuramıyorum şu an) and requested passing the turn someone else (*please someone else (XXX)*). In line 7, MEV changed his orientation from BAH and allocated turn to BER (okay are you ready↑).

The second example of this collaborative behaviour was taken from the first structured divergent task session of the first group. The learners were discussing cheating and some related concepts.

Extract 20. What is cheating?

First Structured Divergent Task- Group 1

1 TUG: what is cheating BERk?
2 BER: err: cheating is-
3 ARD: err:: °bana da şey yaz° huh
for me write that
+orients to SEY
4 SEH: [(ing)] koyalım
lets put (ing)
5 ARD: [huh] don[t obey]
6 BER: [earned] earn something
7 TUG: °o[ka::y°
8 BER: [from (bad)
9 ARD: the rules
10 BER: way
11 ARD: rules

((says in Turkish spelling))

12 (0.5)

13 TUG: [ya::::

oh:::

14 SEH: [başkasını (dikiz]lemek) mi [noluyo

does it mean (peeking) or what

15 TUG: [like] [what?]

16 ARD: °[yok] kurallara uymamak°

no not obeying rules

17 BER: err::: °(XXX)°

18 ARD: err is cheating eve[r acceptable?]

19 → TUG: [berat is spea]king mhh

20 ALL: ((laugh))

21 BER: i think enough

In this particular extract, TUG addressed a question to BER in line 1(what is cheating BERk?). In line 2, BER started to define cheating (err: cheating is-). After BER's turn, ARD oriented to SEH who was the recorder of the group discussions. In line 3, ARD told SEH to record of his previous utterances in L1 (err:: °bana da şey yaz° huh). In line 4, SEH responded to ARD's turn ([(ing)] koyalım) and he started to have a conversation with ARD. BER was simultaneously pursuing his explanation in lines 6 ([earned] earn something), 8 ([from (bad)) and 10 (way). In line 13, TUG used a change of state token ([ya::::) and requested an explanation in line 15 ([like] [what?]). BER started a response turn in line 17 (err::: °(XXX)°). In line 18, ARD addressed all the participants and initiated a new question (err is cheating eve[r acceptable?]). However, TUG announced that BER was still speaking in line 19 ([berat is spea]king). BER again took the turn in line 21 and closed his turn (i think enough).

The third example was taken from the second unstructured convergent task session of the first group. In this particular extract, one learner's contribution to the discussion was praised by his partner.

Extract 21. Deciding on a holiday destination for the weekend with a limited budget

Second Unstructured Convergent Task- Group 1

1		MEV:	and we can otostop cekebiliriz otostop otostop
			hitchhike hitchhike hitchhike
2		MER:	yeah yeah yeah
3		MEV:	yeah it s it s
4		MER:	it s good idea
5		MEV:	yeah otostop cekicez
			we will hitchhike
6		OKN:	oh::
7		MER:	((laugh))
8		MEV:	((looks at his phone))
9	→	BER:	hitchhike
10		MER:	err we spend
11		MEV:	otostop
			hitchhike
12		MER:	our money in Antalya firstly we go to in [err five stars hotel
13	→	MEV:	[high hitchhiking] yes
14		MER:	and
15		OKN:	club side [coast
16		MER:	[and after yes after that we spend our money and after
17	→		that we ((looks at MEV's phone)) hichhiking
18			((wrong pronunciation))
19		ALL:	((laugh))
20	→	MER:	what is this
21	→	MEV:	hithiting ((wrong pronunciation))
22	→	MER:	hit hiking ((wrong pronunciation))
23	→	MEV:	wait
24	→	MER:	with hith
25	→	BER:	hitch hitch
26		MEV:	((looks at his phone))
27		DIC:	otostop otostop
			hitchhike hitchhike
28		MEV:	otostop mu
			is it hitchhike

29		MER:	otostop
			hitchhike
30		MEV:	yok yanlis yazmisim bi dakka hit-
			no i misspelt one minute
31	→	BER:	hitch hitch hitchhike allahim ya
			oh my god
32		MER:	hitchhiking
33		BER:	hitchhike
34		DIC:	hitchhike
35		MER:	hı
			oh
36		MEV:	hitchhike
37		MER:	hitchhike
38	→	MEV:	you re [really good]

In this extract, MEV initiated the turn in L2 by offering that they could hitchhike to their destination. However, he used the L1 translation of hitchhike (otostop cekebiliriz otostop otostop). His idea was accepted by MER in lines 2 (yeah yeah yeah) and 4 (it s good idea). In line 5, MEV repeated in L1 that they would hitchhike (yeah otostop cekicez) and he started to look at his phone in line 8. BER provided the L2 translation of the word (hitchhike) in line 9. However, BER did not get an orientation from MEV who continued searching on his phone in line 11 (otostop). MER simultaneously started to summarise the plan for their holiday in lines 10 (err we spend), 12 (our money in Antalya firstly we go to in [err five stars hotel). In line 13, MEV overlapped the last part of MER's previous turn and used the L2 translation of hitchhike ([high hitchhiking]). In lines 14 and 16, MER continued summarising the plan. In line 17, she stopped and looked at MEV's phone and mispronounced the word (hichhiking). In line 20, she requested information (what is this). MEV also mispronounced the word in line 21 (hithiting) and MER repeated MEV's incorrect pronunciation in line 22 (hit hiking). In line 23, MEV used his phone again (wait) while MER was trying to pronounce hitchhike correctly in line 24 (with hith). BER corrected MER's previous turn (hitch hitch) in line 25. MEV consulted the online dictionary in line 27, but he announced that he misspelt the word in line 30 (yok yanlis yazmisim bi dakka hit-) because the dictionary pronounced the L1 of the word in line 27 (otostop otostop). BER again provided the correct version of the word in line 31 (hitch hitch hitchhike allahim ya). MER oriented to BER's previous

turn in line 32 (hitchhiking) by repeating the word. BER again pronounced the word in line 33 (hitchhike). His turn was followed by the pronunciation of online dictionary in line 34 (hitchhike). In line 35, MER used a change of state token (hı) in L1. In line 36, MEV repeated the correct pronunciation (hitchhike) and this was followed by MER in line 37. MEV finally oriented to BER in line 38 and praised him on his provision of the correct pronunciation (you re [really good]) although BER already provided the correct pronunciation in line 9.

Task policing. The next task-related collaborative behaviour was found to be 'task policing'. This collaborative behaviour was initiated when the current speaker started to talk about something irrelevant to the task. In those instances, other learners in the group directed the speaker to focus on the task. This collaborative turn was found in other relevant studies (Erten & Altay, 2009; Gillies, 2006; Danli, 2011). Erten and Altay (2009) named this collaborative act as invitation which involves requesting partners to focus on the activity when they wander away from the subject. Gillies (2006) similarly provided 'directs' which aims to discipline other learners in order to focus attention. Danli's definition (2011) of what was named as 'direction maintenance' corresponded more to what was found in the present study as task policing.

The following example was taken from the second unstructured divergent task session of the second group. The students were talking about why football was so popular.

Extract 22. Why do you think football is so popular?

Second Unstructured Divergent Task- Group 2

1		TUG:	why do you like football SEHbaz? To SEHbaz every question
2		SEH:	i-
3		BUR:	SEHbaz don't like that (question)
4		TUG:	why?
5		SEH:	not only football i like sport relaxing me
6	→	TUG:	but our topic is a football you so you have to talk about football

TUG initiated this particular conversation by requesting an explanation from SEH in line 1 (why do you like football SEHbaz? To SEHbaz every question). He attempted to answer the question in line 2 (i-) but he was interrupted by BUR in line 3 (SEHbaz don't like that (question)). TUG repeated part of his question line 4

(why?). SEH provided a response to TUG's turn in line 5 (not only football i like sport relaxing me). However, in line 6, TUG explicitly provided a task policing and stated that SEH had to talk about football (but our topic is a football you so you have to talk about football).

The extract 23 below was taken from the first structured convergent task session of the first group during which the learners were talking about the craziest things university students should do.

Extract 23. What are the five craziest things a university student should do?

First Structured Convergent Task- Group 1

1		BUR:	i hear a a girl err °hedek miydi otostop°
			is it hedek for hitchhike
2		MER:	haycayking hiçing neydi lan
			what was it bro
3		BER:	hitchhiking
4		MEV:	hitch hitch hitchhiking de ya işte
			say it that way
5		MER:	hitchhiking
6		BUR:	hı hitchhiking
7		MEV:	you know
8		BUR:	err and err in err and she go and after if you can err if you read the
9			err hacettepe itiraf ((laugh))
			confess
10		MER:	yeah
11		BUR:	the old news err girl says not only err damage for girl but err it s
12			irritating for a girl for example look bad and says i love you
13		MER:	ye::s
14		BUR:	err it s bad i think because if a girl err err ma- make a hayçeking
15	→	MEV:	°MERgül konudan uzaklaşıyoruz°
			MERgul we are getting off the point
16	→	MER:	ye:::s:: err
17		BUR:	((laugh))
18	→	MER:	my ((laugh)) friends $please stay on$
19		MEV:	okay
20		MER:	i think we finished what do you think?

In line 1, BUR initiated the conversation about hitchhiking in the university campus. However, she was hesitant about hitchhiking, and therefore she requested information from others in L1 (i hear a a girl err °hedek miydi otostop°). In line 2, MER provided the incorrect pronunciation of hitchhike and she also requested information in L1 (haycayking hiçing neydi lan). BER provided the correct pronunciation of the word in line 3 (hitchhiking) followed by MEV's contribution in line 4 (hitch hitch hitchhiking de ya işte). MER confirmed their contribution in line 5 (hitchhiking). BUR used a change of state token first in line 6 and repeated the correct pronunciation of the word (hı hitchhiking). Starting from line 8, BUR provided an example of a girl who hitchhiked on the campus until line 14. MEV addressed MER in a quiet voice in line 15 and warned her that they started getting of the point in L1 (°MERgül konudan uzaklaşıyoruz°) (note: in this session, MER was the facilitator and she was responsible for keeping other learners on task during the discussion). MER accepted MEV's warning in line 16 (ye:::s:: err) and provided a task policing in line 18 (my ((laugh)) friends $please stay on$).

Learners also elaborated on their roles to keep other learners on task if they did not participate in or listen to other's discussion. This was especially observed in the structured tasks probably because due to the assigning group roles to the participants. Except from the last structured task, the students started their conversation by elaborating on their roles at the beginning of each task. The following extract was taken from the first structured task session of the first group. The learners were assigned to discuss cheating.

Extract 24. What is cheating?

First Structured Divergent Task- Group 1

1		TUG:	okay (0.7) gu:ys (1.3) hi guys
2		ALL:	((silence))
3		ARD:	yes start
4	→	TUG:	you are the fo-fo fonctuner
5			(0.7)
6		ARD:	[yes]
7	→	TUG:	[neydi?] fonctuner (XXX) ne biliyim
			i don't know
8	→	ARD:	i am °fonctu[ner°

9 → TUG: [bilmiyorum bişey vardı orda
i don't know there was something like that
10 → BER: °facili- (XXX)°
11 TUG: [şey nerde
where is it
12 ALL: ((laugh))
13 ARD: al
take it
+passing the paper
14 → BER: °facility° faci[(XXX)
15 → TUG: [you are t[he-
16 → ARD: [i]am [director
17 → TUG: [facilitator come on [you s]peak

In line 1, TUG greeted other learners to initiate the conversation (okay (0.7) gu:ys (1.3) hi guys). There was a silence in line 2 and ARD explicitly initiated the conversation in line 3 (yes start). TUG referred to ARD's role of being the facilitator in line 4, but he used an incorrect word (you are the fo-fo fonctuner) instead of facilitator. Although it was accepted by ARD in line 5 ([yes]), TUG asked for information in line 7 ([neydi?] fonctuner (XXX) ne biliyim) in L1. In line 8, ARD confirmed TUG's provision (i am °fonctu[ner°). However, TUG pursued his search of the correct name of the role in line 9 ([bilmiyorum bişey vardı orda) by using L1. In line 10, BER used half of the word (°facili- (XXX)°) in a quiet voice. In line 11, TUG referred to the sheet that was distributed for the duties of the roles ([şey nerde) and ARD passed the sheet in line 13 (al). In line 14, BER again provided the name of the role in a quiet voice (°facility° faci[(XXX)) but he was not oriented by other learners. In line 16, ARD announced that he was holding the role of facilitator ([i]am [director). In line 17, TUG also referred to ARD's role of being facilitator and told him to initiate the discussion ([facilitator come on [you s]peak).

Learners' elaboration on roles as a task policing was also observed in the middle of the interactions. Such an exchange helped keeping the partners on the task or inviting a learner to participate in the discussion. The extract 24 was taken from the first structured convergent task session of the first group. This particular moment occurred through the end of discussion.

Extract 25. What are the five craziest things a university student should do?

First Structured Convergent Task- Group 1

1		MEV:	i think the first idea is err
2		MER:	°make hitchhiking mi diye geçer yoksa hitchhiking mi° ((incorrect pronunciation))
			is it like make hitchhiking or only hitchhiking
3		MEV:	travel
4		BER:	hitchhiking ((incorrect pronunciation))
5		MER:	hı by hitchhiking ((incorrect pronunciation))
6		MEV:	by
7		MER:	°nasıl yazıldığını gösterir misin°
			can you show me how it is written
8		BER:	°hitchhike hitchhiking° ((correct pronunciation))
9		MEV:	°banane ya ben bakıcam°
			no i am going to search it
10		MER:	h i t
11		BER:	°hitchhiking°
12		MER:	i say
13		MEV:	°(get up)° ((orients to MER))
14		BER:	°tamam doğru yazmışsın hitchhiking diye okunuyo° hitchhiking
			right you wrote it correct it is pronounced as hitchhiking
15		MEV:	hitchhiking ((incorrect pronunciation))
16		BER:	o şey (aralığındı)
			that was (gap)
17		MEV:	hitchhiking ((correct pronunciation))
18		BER:	tamam [bu otostop senin dediğin aralığı (XXX)
			okay this is hitchhike the one you say is gap (XXX)
19		MER:	[hitchhiking yes i think the second one] is burcu's idea
20		MEV:	hı
21	→	MER:	please listen to me i am a yönetici [((smile))err i think the second]
22	→	MEV:	[i think every interesting]
23	→	MER:	idea err the second crazy idea is burcu's idea stay library library
24		MEV:	library
25		MER:	$library$
26		BUR:	library

27 MEV: stay in a library

28 MER: library ((laugh)) i dont see

In this particular conversation, MEV was the recorder while MER was the facilitator of the group discussion. MEV started to summarise the group discussion in line 1 (i think the first idea is err). In line 2, MER requested information about the use of hitchhike in L1 (°make hitchhiking mi diye geçer yoksa hitchhiking mi°). She, however, pronounced hitchhike incorrectly. In line 4, BER also provided the incorrect pronunciation (hitchhiking). In line 7, MER requested the spelling of hitchhike in L1 (°nasıl yazıldığını gösterir misin°). This created a moment of searching the spelling of hitchhike among MER, MEV and BER between the lines 7 and 13. In line 14, BER oriented to MEV who was taking notes and confirmed that MEV spelt hitchhike correctly (°tamam doğru yazmışsın hitchhiking diye okunuyo° hitchhiking). Between the lines 15 and 18, MEV and BER discussed the meaning of hitchhike and a similar word which had a different meaning in L1 (tamam [bu otostop senin dediğin aralığı (XXX)). Simultaneously, MER overlapped BER's turn in line 18 and pursued the summary of their discussion in line 19 ([hitchhiking yes i think the second one] is burcu's idea). However, she was not oriented by MEV and BER and she explicitly referred to her role of the facilitator in line 21 (please listen to me i am a yönetici) to involve others in her summary of the task.

The following example was taken from the first structured divergent task session of the second group. In this task, OZA was the recorder of the group discussion and he was taking note of other's discussion. The learners were discussing the cheating. This particular moment occurred in the middle of learners' discussion.

Extract 26. What is cheating?

First Structured Divergent Task- Group 2

1 → KAN: why dont you speak
+turns to OZA
(0.7)

2 → OZA: cause i am report recorder

3 OKN: ((smile))

4 KAN: you-

5 → SIM: you can [speak]

6		OZA:	[it's very]
7		KAN:	it's [not]
8		OZA:	[it's very] hard
9		ALL:	((laugh))
10			(0.4)
11	→	OKN:	you should speak
12			(0.4)
13	→	KAN:	you can write what you say
14			(0.4)
15		OZA:	err it's your turn (0.5) err şunları topluyorum bi saniye
			i am summarising one minute

In line 1, KAN oriented to OZA who took less turns than others (why dont you speak). In line 2, OZA responded to KAN's question by referring to his role as a recorder (cause i am report recorder). In line 5, SIM told OZA that he could speak (you can [speak]). However, in line 8, OZA stated the reason why he did not talk ([it's very] hard). In line 11, OKN also told OZA to take a turn (you should speak). KAN further offered a suggestion in line 13 (you can write what you say). However, OZA passed the turn to others by telling that he was summarising their decision in line 15 (err it's your turn (0.5) err şunları topluyorum bi saniye).

Simplification of the task. Another task-related collaborative action was observed as the 'simplification of the task'. This collaborative move was initiated when a participant did not understand what was required to do in the task and asked for an explanation. Other participants in the group either simplified the task by changing the words with more frequent words or by using the first language. This collaborative behaviour was similar to Beatty and Nunan's (2004) definition of 'explain text / task / ideas' categorisation. According to researchers, this collaborative strategy created a common understanding just after the explanation of the task similar to the present study. Kos (2013) also categorised 'explanations' which were instances during which learners explained language or task-related issues. Simplification in the present study is similar to Kos' categorisation with regard to his reference to task-related issues. Danli (2011) also provided a function of scaffolding as 'simplifying the task' which perfectly fits into what was described and provided in the present study. Sato and Viveros (2016)

distinguished the interaction where learners identified and analysed the task rather than linguistic issues in their study. The authors coded those instances as task-related collaboration. The following example was taken from the first unstructured divergent task session of the second group. The task was about the learners' ideas on the online dating.

Extract 27. What do you think about online dating?

First Unstructured Divergent Task- Group 2

1	→	SEH:	ben dinlemedim
			i didn't listen
2	→	TUG:	she said-
3		SEH:	he mi?
			is it he
4		TUG:	yok
			no
5	→	BUR:	(yüz yüze) gelmeden tanıştığın insanlarla ilgili konuşcaz
			we will talk about people whom we met without face-to-face
6		ARD:	[I think it's dangerous]
7	→	BUR:	[insanlarla tanışmak doğru mu]
			it is right to meet people

In this extract, SEH announced in L1 that he hadn't listened to the instructions of the task in line 1 (ben dinlemedim). TUG started to explain the task in L2 in line 2 (she said-), but he was interrupted by ARZ who was sitting next to him and he oriented to ARZ in line 4 (yok). BUR explained the instructions of the task in L1 in lines 5 ((yüz yüze) gelmeden tanıştığın insanlarla ilgili konuşcaz) and 7 ([insanlarla tanışmak doğru mu]).

In the extract below which was taken from the second divergent task session of the second group, simplification of the task was accomplished in L2.

Extract 28. Why do you think football is so popular?

Second Unstructured Divergent Task- Group 2

1	→	TUG:	do you think footballers paid too much?
2	→	BUR:	oh
3	→	TUG:	lady
4	→	BUR:	please repeat

5 TUG: do you think
6 BUR: yes
7 TUG: footballers
8 BUR: hi
9 TUG: footballers
10 BUR: yes
11 TUG: are paid too much
12 ARD: yes
13 → TUG: they are are they earning so much money? you think?
14 → BUR: yes
15 → TUG: yes
16 → BUR: of course

In line 1, TUG read on of the sub-questions of task written on the board (do you think footballers paid too much?). BUR gave a minimal response in line 2 (oh) but she did not provide more answer. In line 3, TUG addressed BUR explicitly (lady) and BUR asked TUG to repeat the question (please repeat). TUG repeated the same question by dividing into parts in lines 5, 7, 9 and 11. Although BUR responded to TUG's turns during this sequence, she did not provide a response after TUG completed the question in line 11. In line 13, TUG simplified the question by changing the original words in the task with his own words (they are are they earning so much money? you think?). After this turn, BUR provided an answer to the question in line 14 (yes).

Language policing. The last task-related collaborative behaviour was labelled ad 'language policing' which was frequently employed when the participants used L1 during their interactions. When the learners showed a heavy reliance on the use of L1, other learners asked the speaker to use L2 to explain his ideas. This category was similar to Gillies' (2006) categorisation of directs in terms of giving direction. Language policing was mainly used in conversation analytic studies. For example, Amir and Musk (2013) defined language policing as the "explicit orientation and attempt to reestablish the monolingual policy". Balaman (2016) found that learners oriented to a pre-assigned L2 use rule in online task-based learner interactions. Although the learners were not instructed provide any rule regarding the use of L2 during their interactions, they co-

constructed this rule as the interactions were unfolded. Balaman (2016) also drew attention to this policing was observed in task-oriented contexts.

Extract 29. What is the best age for marriage?

Second Structured Divergent Task- Group 2

1	→	ZUL:	ay türkçe bişey söylemek istiyorum
			oh I want to tell something in turkish
2	→	SIM:	söyleme artık
			please enough
3	→	KAN:	please in english
4	→	ARD:	english
5	→	ZUL:	okay i cant want to err say english
			12 lines deleted
17	→	SIM:	yes ZULhal
18	→	ZUL:	i think
19	→	KAN:	you can do it bence
20	→	ZUL:	not important err marriage age because i think
21		SIM:	you you topic out °out° because we talk we must talk about what is
22			the best marriage age

The extract above was taken from the second structured divergent task session of the second group. ZUL initiated the turn by announcing that she would like to say something in L1 (ay türkçe bişey söylemek istiyorum), but SIM did not accept her request in line 2 (söyleme artık). Similarly, KAN provided a language policing in line 3 (please in english) which was also followed by ARD's policing in line 4 (english). In line 5, ZUL announced that she was not able to explain in L2 (okay i cant want to err say english). Her incorrect use of the sentence was oriented by other learners and they exchanged 12 turns. In line 17, SIM allocated the turn to ZUL again (yes ZULhal). In line 18, ZUL iniatiated her turn (i think) in L2 and this was followed by an encouragement by KAN (you can do it bence) in line 19. ZUL pursued her turn in line 20 (not important err marriage age because i think).

As the qualitative results indicate that the learners employed 13 different collaborative acts in L2 task based peer interactions. Firstly, there were 8 language-related collaborative behaviours which were related to the resolution of any language issues such when learners struggled to find a word or reconstructed each other's incorrectly formed contributions. These were observed to create

opportunities for learning new language items in the emergent context. Language collaboration types also evolved around resolution of any comprehension problem between learners. Language-related collaborative behaviours were a) provision of the word/phrase, b) reconstruction of others' turn, c) request for clarification, d) comprehension check, e) summary of the others' turn, f) request for explanation, g) request for information, h) provision of the L1 translation of the word/utterance.

There were 5 task-related collaborative behaviours occurred when the learners evolved around task-related issues such as keeping learners on task, simplifying the task, and management of the discussion in L2. Task-related collaborative behaviours also helped successful completion of the tasks. The task-related collaborative behaviours found in the current study were a) pooling knowledge/ideas, b) encouragement for participation, c) task policing, d) simplification of the task, e) language policing.

Having qualitatively analysed the data, quantitative analysis was performed to find the most frequently observed collaborative behaviours in the present data. The next part will provide the results of descriptive statistics concerning the frequencies of collaborative behaviours.

The Frequency of the Collaborative Behaviours

The codings of collaborative behaviours were transformed into a MS Excel file to be able to run descriptive statistics. A separate column was allocated for every task and group. This helped me filter each of the collaborative behaviours employed in each of the task types for each group. A count procedure was then performed to find out the frequencies of the collaborative behaviours for each group. The frequencies of the collaborative behaviours of each group provided the overall frequency of the use of collaborative behaviours in each task. This procedure was repeated for each of the collaborative behaviour. This section presents the total collaborative behaviour frequencies of language and task related collaborative behaviours. The frequencies of types of the language and task related collaborative behaviours will also be presented.

The overall collaborative behaviour frequencies. An analysis of the frequency distribution of collaborative behaviours showed that language-related collaborative behaviours were more frequently observed than task-related

collaborative behaviours. In table 13, frequency column represents the frequency of collaborative behaviour groups observed in the data. The percentage (%) column presents the share of each collaborative behaviour group in the overall collaborative behaviour count.

Table 13

The Overall Frequency of Language and Task related Collaborative Behaviours

	Frequency	%
Language-related C.	730	86.29
Task-related C.	116	13.71
TOTAL	846	100%

The examination of the frequencies of each of the collaborative behaviour suggests that the learners employed more language-related collaborative behaviours than task-related behaviours. These findings do not support the study conducted by Sato and Viveros (2016). The authors found that the task-related collaboration were more frequent than language-related collaboration.

To be able to answer the third research question which was to find the most frequently employed collaborative behaviours by the learners, a frequency analysis was run to find the frequencies of the collaborative behaviours without making a distinction between language-related and task-related collaboration. The table 14 below provides the frequencies of the most observed collaborative behaviours in eight tasks in a descending order:

Table 14

The Overall Frequency of the Use of Individual Collaborative Behaviours

Collaborative Behaviours	Frequency	**%**
Provision	210	24.82
Request for clarification	157	18.56
Request for information	132	15.60
Reconstruction	118	13.95
Request for explanation	49	5.79
Pooling	38	4.49
Provision of the L1 translation	36	4.26
Task policing	28	3.31
Simplification of the task	20	2.36

Language policing	16	1.89
Comprehension check	15	1.77
Encouragement	14	1.65
Summary	13	1.54
TOTAL	846	100%*

* the sum of percentages makes 99.99 since the values were rounded in MS Excel

The examination of the frequency of the collaborative behaviours suggests that the most employed collaborative behaviour was the 'provision of the word/phrase', followed by 'request for clarification' and 'request for information'. The learners also tended to employ 'reconstruction' followed by 'request for explanation'. In fact, the frequencies of these five collaborative behaviours accounted for 78.72% of the total use of collaborative behaviours. It was also observed that these five most frequent collaborative behaviours were grouped under language-related collaboration.

On the other hand, the least frequently employed collaborative behaviours were 'task policing', 'simplification of the task', 'language policing', 'comprehension check', 'encouragement for participation' and 'summary' in overall.

One interesting finding was to see the use of 'language policing' among the least frequently employed collaborative behaviours according to the frequency distribution. Language policing was commonly observed in task-oriented contexts (Amir & Musk, 2013).

The overall language-related collaborative behaviour frequencies. A further frequency analysis was run to find the frequencies of each of the collaborative behaviours within both language-related and task-related collaboration group. The table 15 below reports the frequencies of the use of language-related collaborative behaviours in the descending order. The frequency column represents the frequency of individual language-related collaborative behaviour while % column presents the share of the frequency of each language-related collaborative behaviour.

Table 15

The Frequency of the Use of Language-related Collaborative Behaviours

Language-related collaborative behaviours	Frequency	%
Provision	210	28.77
Request for clarification	157	21.51
Request for information	132	18.08
Reconstruction	118	16.16
Request for explanation	49	6.71
Provision of the L1 translation of the word/ utterance	36	4.93
Comprehension check	15	2.05
Summary	13	1.78
TOTAL	730	100%

With regard to language-related collaborative behaviours, the examination of the frequency analysis of collaborative behaviours indicated that the most frequently employed behaviour was the 'provision of the word/phrase' which was used 210 times, representing 28.77% of the total use of language-related collaborative behaviours. It was followed 'request for clarification' and 'request for information'. 'Request for clarification' was used 157 times, representing 21.51% of the total use while 'request for information' was used 132 times, accounting for 18.08% of the total collaborative behaviour use by learners. The frequencies of these three collaborative behaviours accounted for 68.36% of the total language-related collaborative acts. The collaborative behaviour frequencies indicated that the learners involved very much in a small number of collaborative behaviours.

Learners seemed to employ 'reconstruction' as the fourth most frequent collaborative behaviour, which accounted for 16.16% of the total language-related collaborative behaviours. It was employed 118 times by the learners. The next most frequently employed collaborative behaviour was 'request for explanation' which accounted for 6.71% of total collaborative behaviours, with the use of 49 times.

The least observed language-related collaborative behaviours were 'provision of the L1 translation of the word/utterance' which was used 36 times, accounting for 4.93% of the total collaborative behaviour use. This was followed by 'comprehension check' (used 15 times) representing 2.05% and 'summary of

others' turn' (used 13 times) which accounted for 1.78% of the total collaborative behaviours. These three collaborative behaviours accounted only for 8.76% of total collaborative behaviour.

The overall task-related collaborative behaviour frequencies. This section presents the most frequently observed task-related collaborative behaviours. Table 16 below summarizes the frequencies of each of the task-related collaborative behaviours in the descending order. The frequency column represents the frequency of eachof the task-related collaborative behaviour while % column presents the share of the frequency of each task-related collaborative behaviour.

Table 16

The Frequency of the Use of Task-related Collaborative Behaviours

Task-related collaborative behaviours	Frequency	%
Pooling	38	32.76
Task policing	28	24.14
Simplification of the task	20	17.24
Language policing	16	13.79
Encouragement	14	12.07
TOTAL	116	100%

The examination of the frequencies of task-related collaborative behaviours suggests that the most frequently employed task-related collaborative behaviours were 'pooling' which was used 38 times, representiong 32.76% of the total use of task-related collaborative behaviours, followed by 'task policing' (used 28 times), accounting for 24.14% of the total use of collaborative behaviours. These two collaborative behaviours accounted for 56.90% of total use of task-related collaborative behaviours.

The frequency of 'simplification of the task' (used 20 times) accounted for 17.24% of total task-related collaborative behaviours. One interesting finding was to see 'language policing' among the least frequently observed task-related collaborative behaviour. This collaborative behaviour was used 16 times and accounted for 13.79% of total collaborative behaviours, followed by

‘encouragement’ which was used 14 times and represented 12.07% of the total use of task-related collaborative behaviours.

Overall, the language-related collaborative behaviours were most frequently employed than task-related collaborative behaviours in L2 task-based peer interactions. The most frequently employed language related collaborative behaviour was ‘provision of the word/phrase’ while the least frequently observed language-related collaborative behaviour was ‘summary of the other’s turn’. On the other hand, among the total employed task-related collaborative behaviours, ‘pooling’ was the most frequently observed collaborative behavior. The least frequently observed task-related collaborative behaviour was found to be ‘encouragement’.

This section has provided the overall frequency of collaborative behaviours. Each collaboration group was further analysed with frequency analysis to differentiate between the most and the least frequently employed collaborative behaviours by the learners. The next section will report the effect of task types on collaborative behaviours.

The Effect of Task Types on Collaborative Behaviours

This section presents the findings of the task type effect on learners’ use frequencies of the collaborative behaviours. To be able to examine the task type effect on collaborative behaviours, the sum of the frequencies of both unstructured and structured divergent tasks were calculated in the vertical total frequency column for each language and task-related collaboration group. The same procedure was used for both unstructured and structured convergent tasks. The percentages were measured in accordance with the total frequency number of all collaborative behaviours. The table 17 below shows the overall frequency of collaborative behaviour groups between divergent and convergent tasks. The columns (*f*) represent the frequency of instances of collaborative behaviours observed in the data. The percentage (%) column presents the share of each collaborative behaviour in the overall collaborative behaviour count.

Table 17

The Overall Frequency of Collaborative Behaviours between Tasks

	DIVERGENT				CONVERGENT				
	UNST	ST	TOTAL		UNST	ST	TOTAL		
	f	*f*	*f*	%	*f*	*f*	*f*	%	OVERALL *f*
Language-related C.	191	123	314	81.14	276	140	416	90.63	730
Task-related C.	34	39	73	18.86	32	11	43	9.37	116
TOTAL	225	162	387	100.00	308	151	459	100.00	846

The results suggested that the overall frequency of collaborative behaviours was more observed in convergent tasks. Both language and task-related collaborative behaviours were used 459 times, representing 54.26% of total collaborative behaviours in convergent tasks. On the other hand, both of the collaborative behaviour groups were used 387 times. This accounted for 45.74% of total collaborative behaviours in divergent tasks.

The results also showed that language-related collaborative behaviours were more frequently employed in convergent tasks. The frequency of these collaborative behaviours, which were used 416 times, accounted for 90.63% of total use of the language-related collaborative behaviours in convergent tasks. On the other hand, the frequency of these collaborative behaviours in divergent tasks (used 314 times) accounted for 81.14% of total use of language related collaborative behaviours.

One interesting finding, however, was to see the frequency of task-related collaborative behaviours between divergent and convergent tasks. The results indicated that the overall frequency of task-related collaborative behaviours accounted for 18.86% of total use of task-related collaborative behaviours (used 73 times) in divergent tasks. Conversely, the use of task-related collaborative behaviours was less frequently employed (used 43 times) in convergent tasks. The frequency of task-related collaborative behaviours in convergent tasks accounted for 9.37% of total use of task-related collaborative behaviours.

Overall, the results suggested that there was a task type effect on learners' use of both collaborative behaviour groups. For example, the sum of both language and task related collaborative behaviours was more frequently employed in convergent tasks. However, the frequency of language-related and task-related collaborative behaviours showed a difference between divergent and convergent tasks. The frequency of language-related collaborative behaviours accounted for a larger proportion of percentage in convergent tasks. On the other hand, task-related collaborative behaviours were more frequently employed in divergent tasks.

The effect of task type on language-related collaborative behaviours. A further frequency analysis was run to see whether there was a task type effect on individual collaborative behaviours. The table 18 below presents the frequencies of language-related collaborative behaviours employed in divergent and convergent tasks. The columns (*f*) represent the frequency of each language-related collaborative behaviour while % column presents the share of the frequency of each language-related collaborative behaviour in both divergent and convergent tasks.

Table 18

The Frequency of Each Language-related Collaborative Behaviour between Tasks

	DIVERGENT				CONVERGENT				
	UNST	ST			UNST	ST			
Language-related C.	*f*	*f*	TOTAL *f*	%	*f*	*f*	TOTAL *f*	%	OVERALL *f*
Provision	56	25	81	25.80	76	53	129	31.01*	210
Request for clarification	31	22	53	16.88	77	27	104	25.00*	157
Request for information	31	33	64	20.38*	50	18	68	16.35	132
Reconstruction	39	22	61	19.43*	39	18	57	13.70	118
Request for explanation	15	6	21	6.69	17	11	28	6.73*	49
Provision of the L1 translation	10	8	18	5.73*	9	9	18	4.33	36
Comprehension check	4	3	7	2.23*	5	3	8	1.92	15
Summary	5	4	9	2.87*	3	1	4	0.96	13
TOTAL	191	123	314	100.00	276	140	416	100.00	730

* indicates the higher percentage of frequency

The results indicated the task type effect had an impact on the total use of the frequencies of the language related collaborative behaviours. The collaborative behaviours in convergent tasks accounted for 56.99% of total use of language-related collaborative behaviours. They were used a total of 416 times in convergent tasks. On the other hand, these collaborative behaviours were used 314 times in divergent tasks, representing 43.01% of total use of language-related collaborative behaviours.

In regard to individual language-related collaborative behaviours, three of the language-related collaborative behaviours were more frequently employed in convergent tasks. The other five language-related collaborative behaviours were more frequently observed in divergent tasks.

The more frequently employed language-related collaborative behaviours in convergent tasks were ‘provision’, ‘request for clarification’, and request for explanation’. Although ‘provision’ was the most frequently observed language

behaviour within divergent and convergent tasks, the frequency of the use of this collaborative behaviour in convergent tasks were higher than divergent tasks. This collaborative behaviour was used 129 times, representing 31.01% of the total use of collaborative behaviours in convergent tasks. On the other hand, it was used 81 times, accounting for 25.80% of the total use of collaborative behaviours in divergent tasks.

The other more frequently employed language-related collaborative behaviour was 'request for clarification' which was also found as the second most frequently employed language-related collaborative behaviour in convergent tasks. This collaborative behaviour was used 53 times, accounting for 16.88% of the total use of the language-related collaborative behaviours in divergent tasks. On the other hand, it was used 104 times, representing 25% of the total use of the collaborative behaviours in convergent tasks.

The other more frequently employed language-related collaborative was 'request for explanation' in convergent tasks. This collaborative behaviour was used 28 times, representing 6.73% of the total use of the language-related collaborative behaviours in convergent tasks. On the other hand, this collaborative behaviour was used 21 times, representing 6.69% of the total use of the collaborative behaviours in divergent tasks. The percentages suggest that there was a small difference in the frequency of this collaborative between convergent and divergent tasks. These three collaborative behaviours accounted for 62.74% of total use of language-related collaborative behaviours in convergent tasks.

The remaining five language-related collaborative behaviours that were more frequently employed in divergent tasks were 'request for information', 'reconstruction', 'provision of the L1 translation', 'summary' and 'comprehension check'. 'Request for information' was used 64 times, representing 20.38% of the total use of collaborative behaviours while it was used 68 times, accounting for 16.35% of the total use of collaborative behaviours in convergent tasks.

The other collaborative behaviour 'reconstruction' was used 61 times in divergent tasks, representing 19.43% of the total collaborative behaviours. On the other hand, it was used 57 times, accounting for 13.70% of the total collaborative behaviours in convergent tasks. 'Provision of the L1 translation' was observed 18

times and it accounted for 5.73% of the total collaborative behaviours in divergent tasks. Interestingly, although this collaborative behaviour was also used 18 times it represented a total of 4.33% of the total collaborative behaviours in convergent tasks. ‘Comprehension check’ was observed 7 times in divergent tasks, representing 2.23% of the total collaborative behaviours. Although this collaborative behaviour was used 8 times in convergent tasks and it accounted for 1.92% of the total use of collaborative behaviours. The last collaborative behaviour ‘summary’ was observed 9 times in divergent tasks, accounting for 2.87% of the total use of the collaborative behaviours. On the other hand, it was employed 4 times, representing 0.96% of the total use of the collaborative behaviours in convergent tasks. These five language-related collaborative behaviours accounted for 50.64% of total use of the language related collaborative behaviours in divergent tasks.

The effect of task type on task-related collaborative behaviours. To see whether there was a task type effect on the frequency of task-related collaborative behaviours, a further frequency analysis was run for each task-related collaborative behaviour between tasks. The table 19 below summarizes the frequencies of all the task-related collaborative behaviours. The columns (*f*) represent the frequency of each task-related collaborative behaviour while % column presents the share of the frequency of each task-related collaborative behaviour in both divergent and convergent tasks.

Table 19

The Frequency of Each Task-related Collaborative Behaviour between Tasks

	DIVERGENT				CONVERGENT				
	UNST	ST			UNST	ST			
Task-Related C.	*f*	*f*	TOTAL *f*	%	*f*	*f*	TOTAL *f*	%	OVERALL *f*
Pooling	16	9	25	34.25	10	3	13	30.23	38
Task policing	4	13	17	23.29	6	5	11	25.58	28
Simplification	6	11	17	23.29	2	1	3	6.98	20
Language policing	5	2	7	9.59	8	1	9	20.93	16
Encouragement	3	4	7	9.59	6	1	7	16.28	14
TOTAL	34	39	73	100.00	32	11	43	100.00	116

The results suggested that the overall use of the task related collaborative behaviours was more frequent in divergent tasks. The frequency of collaborative behaviours accounted for 62.93% of total use of collaborative behaviours in divergent tasks. Task-related collaborative behaviours were used a total of 73 times in divergent tasks. On the other hand, task-related collaborative behaviours were used 43 times in convergent tasks, accounting 37.07% of the total use of collaborative behaviours.

The analysis of individual collaborative behaviours indicated that three of the task-related collaborative behaviors were more frequently employed in convergent tasks. These were ‘task policing’, ‘language policing’ and ‘encouragement’. The frequencies of these three task-related collaborative behaviours accounted for 62.79% of total use of collaborative behaviours in convergent tasks.

‘Task policing’ was observed 11 times in convergent tasks, accounting for 25.58% of the total use of the task-related collaborative behaviours. Although this collaborative behaviour was more observed in divergent tasks (used 17 times), it accounted for 23.29% of the total use of the collaborative behaviours.

‘Language policing’ was observed 9 times in convergent tasks, accounting for 20.93% of the total use of the collaborative behaviours. On the other hand, it was used 7 times in divergent tasks and represented a total of 9.59% of the total use of the collaborative behaviours in divergent tasks.

‘Pooling’ was employed 25 times in divergent tasks, representing 34.25% of the total use of the task-related collaborative behaviours. On the other hand, this collaborative behaviour was observed 13 times, accounting for 30.23% of the total use of collaborative behaviours in convergent tasks.

Although ‘encouragement’ was observed similarly in both divergent and convergent tasks (used 7 times), it represented a total of 16.28% of the total use of the task-related collaborative behaviours in convergent tasks while it accounted 9.59% of the total use of the task-related collaborative behaviours in divergent tasks.

Summary. Overall, collaborative behaviours were more frequently employed in convergent tasks. Similarly, language-related collaborative behaviours were more frequently observed in convergent tasks. However, task-related collaborative behaviours were more frequently employed in divergent tasks.

Individual collaborative behaviours also showed a difference in frequency between divergent and convergent tasks. With regard to language-related collaborative behaviours, ‘provision’, ‘request for clarification’, and request for explanation’ were more frequently observed in convergent tasks. On the other hand, the language-related collaborative behaviours such as ‘request for information’, ‘reconstruction’, ‘provision of the L1 translation’, ‘summary’ and ‘comprehension check’ were more frequently employed in divergent tasks.

In regard to task-related collaborative behaviours, three of the collaborative behaviours were more frequently employed in convergent tasks. These were ‘task policing’, ‘language policing’ and ‘encouragement’. The remaining two collaborative behaviours namely ‘pooling’ and ‘encouragement’ were more frequently observed in divergent tasks.

The next section presents the findings of the effect of structuring groups on learners’ use of the collaborative behaviours.

The Effect of Structuring Groups on Collaborative Behaviours

To be able to investigate the effect of structuring groups on learners' use of the collaborative behaviours, a count procedure was performed with the sum of each of the language-related and task-related collaborative behaviours for unstructured divergent and convergent tasks. The same procedure was also conducted for structured divergent and convergent tasks as well. The percentages of each of the collaborative behaviours were also calculated to show the share of each collaborative behaviour in given tasks. The table 20 below presents the overall frequency of language and task-related collaborative behaviours in both unstructured and structured tasks. The columns (*f)* represent the frequency of instances of collaborative behaviours observed in the data. The percentage (%) column presents the share of each collaborative behaviour in the overall collaborative behaviour count.

Table 20

The Overall Frequency of Collaborative Behaviours between Unstructured and Structured Tasks

	UNST				ST				
	Div.	Con.	Total		Div.	Con.	Total		
	f	*f*	*f*	%	*f*	*f*	*f*	%	OVERALL *f*
Language-related C.	191	276	467	87.62	123	140	263	84.03	730
Task-related C.	34	32	66	12.38	39	11	50	15.97	116
TOTAL	225	308	533	100.00	162	151	313	100.00	846

The results suggested that the overall frequency of collaborative behaviours was more observed in divergent tasks. The collaborative behaviours in unstructured tasks were used a total of 533 times, representing 63% of the total use of the collaborative behaviours. On the other hand, the collaborative behaviours were used 313 times and these accounted for 37% of the total use of the collaborative behaviours in structured tasks.

The results also showed that language-related collaborative behaviours were more frequently employed in unstructured tasks. These collaborative behaviours were used 467 times, representing 87.62% of the total use of the language-related collaborative behaviours. On the other hand, language-related collaborative behaviours were employed 263 times, accounting for 84.03% of the total use of the collaborative behaviours in structured tasks.

The results indicated that task-related collaborative behaviours were more frequently employed in structured tasks. Learners employed 50 times of task-related collaborative behaviours, representing 15.97% of the total use of the task-related collaborative behaviours in structured tasks. Although, these collaborative behaviours were observed 66 times in unstructured tasks, they only accounted 12.38% of the total use of the task-related collaborative behaviours.

Overall, the results suggested that learners employed collaborative behaviours more frequently in unstructured tasks. With regard to each collaboration group, there were different results. Language-related collaborative behaviours were more frequently employed in unstructured tasks. On the other hand, task-related collaborative behaviours were more frequently employed in structured tasks. It can be summarised as structuring enabled learners to focus on task-related issues in structured tasks.

The effect of structuring on language-related collaborative behaviours. A frequency analysis was run to see whether there was a structuring effect on individual collaborative behaviours. The table 21 below presents the frequencies of language-related collaborative behaviours employed in unstructured and structured tasks. The columns (*f*) represent the frequency of each language-related collaborative behaviour while % columns present the share of the frequency of each language-related collaborative behaviour in both unstructured and structured tasks.

Table 21

The Overall Frequency of Language-related Collaborative Behaviours in Unstructured and Structured Tasks

	UNSTRUCTURED				STRUCTURED				
	Div.	Con.			Div.	Con.			
Language-related C.	*f*	*f*.	TOTAL *f*.	**%**	*f*	*f*	TOTAL *f*	**%**	OVERALL *f*
Provision	56	76	132	28.27	25	53	78	29.66*	210
Request for clarification	31	77	108	23.13*	22	27	49	18.63	157
Request for information	31	50	81	17.34	33	18	51	19.39*	132
Reconstruction	39	39	78	16.70*	22	18	40	15.21	118
Request for explanation	15	17	32	6.85*	6	11	17	6.46	49
Provision of the L1 translation	10	9	19	4.07	8	9	17	6.46*	36
Comprehension check	4	5	9	1.93	3	3	6	2.28*	15
Summary	5	3	8	1.71	4	1	5	1.90*	13
TOTAL	191	276	467	100.00	123	140	263	100.00	730

* indicates the higher percentage of frequency

The results indicated the structuring had an impact on the total use of the frequencies of the language related collaborative behaviours between unstructured and structured tasks. The collaborative behaviours in unstructured tasks accounted for 63.97% of total use of language-related collaborative behaviours. These were used a total of 467 times in unstructured tasks. On the other hand, these collaborative behaviours were used 263 times in structured tasks, representing 36.03% of total use of language-related collaborative behaviours.

With regard to individual language-related collaborative behaviours, five language-related collaborative behaviours were more frequently observed in structured tasks. These were ‘provision’, ‘request for information’, ‘provision of the L1 translation’, ‘comprehension check’ and ‘summary’. The frequency of these five collaborative behaviours accounted a total 59.70% of the total language related collaborative behaviours.

‘Provision’ was the most frequently observed language behaviour within both unstructured and structured tasks. However, the frequency of the use of this collaborative behaviour in structured tasks was higher than unstructured tasks. This collaborative behaviour was used 78 times, representing 29.66% of the total use of collaborative behaviours in structured tasks. On the other hand, it was used 132 times, accounting for 28.27% of the total use of collaborative behaviours in unstructured tasks.

‘Request for information’ was also more frequently observed in structured tasks. Learners employed this collaborative behaviour 51 times, representing 19.39% of the total use of the language-related collaborative behaviours in structured tasks. This collaborative behaviour was also the second most frequently employed language-related collaborative behaviour in structured tasks. On the other hand, this collaborative behaviour was employed 81 times in unstructured tasks. However, it only represented a total of 17.34% of the total language-related collaborative behaviours.

The third collaborative behaviour ‘provision of the L1 translation’ was observed 17 times, representing 6.46% of the total collaborative behaviours in structured tasks. On the other hand, this collaborative behaviour was used 19 times, but it accounted 4.07% of the total language-related collaborative behaviours in unstructured tasks.

‘Comprehension check’ was employed 6 times, accounting for 2.28% of the total language-related collaborative behaviours in structured tasks while it represented 1.93% of total collaborative behaviours in unstructured tasks. This collaborative behaviour was observed 9 times in unstructured tasks.

‘Summary’ was also more frequently employed in structured tasks. Learners employed this collaborative behaviour 5 times, representing 1.90% of the total language-related collaborative behaviours in structured tasks. On the other hand, learners employed 8 times, accounting for 1.71% of the total collaborative behaviours in unstructured tasks.

The remaining three language-related collaborative behaviours that were more frequently employed in unstructured tasks were ‘request for clarification’, ‘reconstruction’ and ‘request for explanation’. These three collaborative behaviours

accounted for a total 46.68% of the total collaborative behaviours in unstructured tasks. ‘Request for clarification’ was used 108 times, representing 23.13% of the total collaborative beheaviours. On the other hand, this collaborative behaviour was employed 49 times, representing a total of 18.63% of the total collaborative behaviours in structured tasks.

The other collaborative behaviour ‘reconstruction’ was observed more frequently in unstructured tasks. This collaborative behaviour was employed 78 times, representing a total of 16.70% of the total collaborative behaviours. On the other hand, it was employed 40 times and accounted for 15.21% of the total collaborative behaviours in structured tasks.

The last language-related collaborative behaviour ‘request for explanation’ was observed 32 times in unstructured tasks. This represented 6.85% of the total collaborative behaviours. There was a small difference in the frequency of this collaborative behaviour in structured tasks. It was employed 17 times, representing 6.46% of the total language-related collaborative behaviours in structured tasks.

The effect of structuring on task-related collaborative behaviours. To understand whether there was a structuring effect on the frequency of task-related collaborative behaviours, a further frequency analysis was run for each of the task-related collaborative behaviour between unstructured and structured tasks. The table 22 below summarizes the frequencies of all the task-related collaborative behaviours. The columns (*f*) represent the frequency of each task-related collaborative behaviour while % column presents the share of the frequency of each task-related collaborative behaviour in both divergent and convergent tasks.

Table 22

The Overall Frequency of Task-related Collaborative Behaviours in Unstructured and Structured Tasks

	UNSTRUCTURED				STRUCTURED				
	Div.	Con.			Div.	Con.			
Task-Related C.	*f*	*f*	TOTAL *f*	**%**	*f*	*f*	TOTAL *f*	**%**	OVERALL *f*
Pooling	16	10	26	39.39*	9	3	12	24.00	38
Task policing	4	6	10	15.15	13	5	18	36.00*	28
Simplification	6	2	8	12.12	11	1	12	24.00*	20
Language policing	5	8	13	19.70*	2	1	3	6.00	16
Encouragement	3	6	9	13.64*	4	1	5	10.00	14
TOTAL	34	32	66	100.00	39	11	50	100.00	116

* indicates the higher percentage of frequency

The results showed that the structuring had an impact on the total use of the frequencies of the task-related collaborative behaviours between unstructured and structured tasks as well. The collaborative behaviours in unstructured tasks were used 66 times which accounted for 56.90% of total use of task-related collaborative behaviours. On the other hand, these collaborative behaviours were used 50 times in structured tasks, representing 43.10% of total use of task-related collaborative behaviours.

The analysis of individual collaborative behaviours indicated that two of the task-related collaborative behaviors were more frequently employed in structured tasks. These were ‘task policing’ and ‘simplification’. The frequencies of two task-related collaborative behaviours accounted for 60% of total use of collaborative behaviours in structured tasks.

‘Task policing’ was employed 18 times, representing 36% of the total task-related collaborative behaviours in structured tasks. It was used 10 times in unstructured tasks, accounting for 15.15% of the total task-related collaborative behaviours.

‘Simplification’ was also more frequently employed in structured tasks. It was used 12 times, representing a total of 24% of the total collaborative

behaviours. In unstructured tasks, this collaborative behaviour was employed 8 times which accounted 12.12% of the total task-related collaborative behaviours.

The other three task-related collaborative behaviours were more frequently employed in unstructured tasks. These collaborative behaviours were ‘pooling’, ‘language policing’ and ‘encouragement’. They accounted a total of 72.73% of the total task-related collaborative behaviours identified in unstructured tasks.

‘Pooling’ was employed 26 times which represented 39.39% of the total collaborative behaviours in unstructured tasks. This collaborative behaviour was employed 12 times, representing 24% of the total task-related collaborative behaviours in structured tasks.

‘Language policing’ was also more frequently used in unstructured tasks, accounting a total of 19.70% of the total collaborative behaviours (used 13 times). On the other hand, it was employed 3 times in structured tasks, which represented 6% of the total task-related collaborative behaviours.

The last task-related collaborative behaviour was ‘encouragement’. This collaborative behaviour was observed 9 times in unstructured tasks, which accounted 13.64% of the total task-related collaborative behaviours. On the other hand, this collaborative behaviour was used 5 times in structured tasks, representing 10% of the total task-related collaborative behaviours.

Summary. Overall, the results suggested that learners employed collaborative behaviours more frequently in unstructured tasks. With regard to each collaboration group, language-related collaborative behaviours were more frequently employed in unstructured tasks. On the other hand, task-related collaborative behaviours were more frequently employed in structured tasks.

With regard to individual language-related collaborative behaviours, five language-related collaborative behaviours were more frequently observed in structured tasks. These were ‘provision’, ‘request for information’, ‘provision of the L1 translation’, ‘comprehension check’ and ‘summary’. The frequency of these five collaborative behaviours accounted a total 59.70% of the total language related collaborative behaviours. The other three language-related collaborative behaviours ‘request for clarification’, ‘reconstruction’ and ‘request for explanation’ were more frequently observed in unstructured tasks. These three collaborative

behaviours accounted for a total 46.68% of the total collaborative behaviours identified in unstructured tasks.

With regard to the task-related collaborative behaviors, ‘task policing’ and ‘simplification’ were more frequently employed in structured tasks. The frequencies of the two task-related collaborative behaviours accounted for 60% of total use of collaborative behaviours in structured tasks. The other three task-related collaborative behaviours were more frequently employed in unstructured tasks. These collaborative behaviours were ‘pooling’, ‘language policing’ and ‘encouragement’. They accounted a total of 72.73% of the total task-related collaborative behaviours identified in unstructured tasks.

Chapter 5
Conclusion, Discussion and Suggestions

This section will conclude the major findings of the present study, and these will be discussed in light with the current literature in the given order of the research questions. Following this, conclusion and suggestions for further research regarding the collaborative behaviours will be provided. What follows next is a summary of the study which investigated collaborative behaviours in L2 task-based peer interactions in line with task types, namely divergent and convergent tasks and group structuring.

Summary of the study. This study, adopting a sociocultural framework, investigated how the collaboration was enacted by peers in L2 task-based environment. By applying a pre-experimental time-series one group research design, the collaborative behaviours employed by the learners in different tasks were tracked in the current study. In this research scheme, the intervention was provided by the researcher for the role training. The roles were chosen in accordance with the nature of the tasks and the learners were explicitly trained on the duties of these group roles.

A total of 15 learners participated in a total of eight task sessions in the study and the intervention was provided in the middle of the sessions. There were four tasks before the role training, and learners engaged in two divergent and two convergent tasks without employing group roles. The learners engaged in the second four tasks by practising their assigned roles. In these sessions, also, they engaged in two divergent and two convergent tasks.

Learners' interactions during these sessions were recorded and analysed by applying a qualitative grounded theory. Using a constant comparison method, the moments of collaborative behaviours were given possible labels as these collaborative moments were unfolded by the learners. A list of collaborative behaviours was formed and the whole data was analysed in accordance with this list. Complemantary to qualitative analysis, a descriptive frequency analysis was conducted to compare the effect of task types and structuring group work on learners' use of collaborative behaviours. A quantitative analysis was also conducted to investigate learners' engagement in the tasks (Dörnyei & Kormos,

2000) and the complexity of their language production (Ellis & Barkhuizen, 2005). The number of turns and the number of words in each of the tasks were calculated to understand the effect of divergent and convergent tasks on interactional complexity of learners' production in the tasks.

The results indicated that the use of divergent and convergent tasks had an impact on learners' engagement in the tasks. First, the learners had more turns in convergent tasks than divergent tasks in both unstructured and structured task assignment. Structuring was also observed to have an impact on learners' turn-taking in the tasks. The number of turns in divergent structured tasks showed an increase compared to the unstructured divergent tasks. On the other hand, learners engaged in less turns in structured convergent tasks than unstructured convergent tasks.

Learners seemed to produce more words in convergent tasks than divergent tasks. The mean length of turns for four sessions was calculated to understand interactional complexity and the results showed that there was an impact of task types. In both unstructured and structured divergent tasks, the mean length of turns was higher than both of the convergent tasks. However, the mean difference between unstructured divergent and unstructured convergent tasks was observed to be higher than the mean difference between structured divergent and structured convergent tasks. Overall, these findings suggest that learners produced more turns and more words during convergent tasks; but the mean length of turns observed in convergent tasks was really small. This suggested that learners produced shorter turns such as one-word turns in convergent tasks. On the other hand, the results suggest learners produced extended turns in divergent tasks due to the fact that the mean length of turn was bigger in divergent tasks.

The grounded qualitative analysis indicated that learners employed a total of 13 collaborative behaviours in the present study. These collaborative behaviours were divided into two groups, e.g. language-related collaborative behaviours and task-related collaborative behaviours due to their scope. For instance, language-related collaborative behaviours were observed to evolve around the resolution of comprehension issues between learners, to create opportunities for learning new language items in the emergent context. On the

other hand, task-related collaborative behaviours evolved around the task-related issues such as keeping the learners on task, simplifying the task or the management the discussion in L2. They helped the successful completion of the task. There were eight language-related collaborative behaviours and five task-related collaborative behaviours identified in the current data. The definitions and the emergent context of each of the individual collaborative behaviours were provided in Findings Chapter.

Overall, language-related collaborative behaviours were more frequently observed in the present study than task-related collaborative behaviours. The most frequently observed collaborative behaviours were 'provision of the word/phrase', followed by 'request for clarification', 'request for information' and 'reconstruction'. These collaborative behaviours were also related to the language-related collaborative behaviours. On the other hand, the least frequently employed collaborative behaviours were 'task policing', 'simplification of the task', 'language policing', 'comprehension check', 'encouragement for participation' and 'summary' in overall. Except from 'comprehension check' and 'summary', the remaining strategies were grouped as task-related collaborative behaviours. In terms of individual language-related collaborative behaviours, the more frequently employed language-related collaborative behaviours were 'provision of the word/phrase', followed by 'request for clarification' and 'request for information'. The least frequently observed language-related collaborative behaviours were 'provision of the L1 translation of the word/utterance', followed by 'comprehension check' and 'summary of others' turn'. With regard to individual task-related collaborative behaviours, the most frequently employed task-related collaborative behaviours were 'pooling', followed by 'task policing' and 'simplification of the task'. The least frequently task-related collaborative behaviours were 'language policing' and 'encouragement'.

An effect of task type was observed on learners' use of collaborative behaviours. The overall collaborative behaviours were more frequently employed in convergent tasks. However, language-related collaborative behaviours were more frequently observed in convergent tasks. On the other hand, task-related collaborative behaviours were more frequently employed in divergent tasks. Individual collaborative behaviours showed a difference in frequency between

divergent and convergent tasks. The language-related collaborative behaviours, namely ‘provision’, ‘request for clarification’, and request for explanation’ were more frequently observed in convergent tasks. On the other hand, the language-related collaborative behaviours such as ‘request for information’, ‘reconstruction’, ‘provision of the L1 translation’, ‘summary’ and ‘comprehension check’ were more frequently employed in divergent tasks. With regard to task-related collaborative behaviours, ‘task policing’, ‘language policing’ and ‘encouragement’ were more frequently employed in convergent tasks. The other two collaborative behaviours namely ‘pooling’ and ‘simplification’ were more frequently observed in divergent tasks.

Additionally, group structuring had an impact on the frequency of collaborative behaviours. Overall, collaborative behaviours were more frequently observed in unstructured tasks. With regard to each of the collaborative behaviours group, language-related collaborative behaviours were more frequently employed in unstructured tasks. On the other hand, task-related collaborative behaviours were more frequently employed in structured tasks. With regard to individual language-related collaborative behaviours, five language-related collaborative behaviours were more frequently observed in structured tasks. These were ‘provision’, ‘request for information’, ‘provision of the L1 translation’, ‘comprehension check’ and ‘summary’. On the other hand, the other three language-related collaborative behaviours, namely ‘request for clarification’, ‘reconstruction’ and ‘request for explanation’ were more frequently observed in unstructured tasks. With regard to the task-related collaborative behaviors, ‘task policing’ and ‘simplification’ were more frequently employed in structured tasks. The other three task-related collaborative behaviours, namely ‘pooling’, ‘language policing’ and ‘encouragement’ were more frequently employed in unstructured tasks.

This part summarised the aim of the study, the methodology and the analysis employed for the current study. The main findings were summarised in the given order of research questions in Chapter 1. Next the findings of each research question will be discussed with reference to the relevant literature.

The Complexity Measurement of Learners' Production during Peer Interactions

Total number of turns. This section will discuss two effects of task types on both learners' behavioural engagement and language production. However, Edstrom (2015) warns that word count may not provide a clear picture of learners' participation and its depth and quality.

Overall, these quantitative results suggest that learners produced more turns and more words during convergent tasks, which hinted more engagement; but the mean length of turns observed in convergent tasks was really small. This might be related to the nature of the convergent tasks because learners need to solve the task as a group or come to one single conclusion in convergent tasks. This suggested that learners produced shorter turns such as one-word turns or more insert expansions in convergent tasks. On the other hand, the results suggest learners produced extended turns in divergent tasks due to the fact that the mean length of turn was bigger in divergent tasks. Since the nature of divergent tasks is similar to discussion tasks, learners may only state their ideas on the task and may not necessarily respond to their partners' contributions. The turns in divergent tasks may involve just initiation, response, feedback (IRF) sequence without any elaborations on the speakers' turns by the interlocutors.

One interesting finding was to see that learners had more turns in the structured divergent tasks than the unstructured divergent tasks. The reason could be attributed to the nature of roles because the roles define how the work will be done (Cohen, 1994; Cohen & Lotan, 2014). To complete the task, each learner had to practise his or her role during the discussions. Cohen and Lotan (2014, 27) also mentions that unstructured grouping may lead to the dominance of some students and non-participation of others. A closer look into the individual learners' participation in the discussions can make it clear. For example, as the non-participant observer, I realised that some learners dominated the discussions (e.g. TUG). Similarly while transcribing the data, I realised that there were two learners (e.g. BAH and HUS) who had nearly no turns during the first unstructured divergent tasks. This might be because one of the learners (BAH) did not participate in the first trial session conducted a few days before this session. This

session was the first time for her to participate in the speaking club and in the group discussion. Other student (HUS) was observed to have really low language proficiency compared to other learners. His talk consisted of long insert pauses and many hesitation markers. His perceived competence of himself might have caused him to take nearly no turns during the discussions. Therefore, the overall number of turns was observed as smaller than other groups in which all the participants had turns. These learners also did stop attending the speaking club the next session.

These findings support the results of what Altay (2004) found in her study. Altay (2004) used task-based and topic-based activities and compared the talk of the learners in groups during the completion of the tasks. Task-based activities, namely convergent tasks in this study, were explained to carry the same features as convergent tasks elsewhere (e.g. Erten & Altay, 2009). In a similar vein, topic-based activities resembled the nature of divergent tasks used in this study. Altay (2004) found that during the task-based sessions, learners produced a higher number of turns in total as a group than topic-based sessions in three out of four session themes.

This was also suggested by another study conducted by Erten and Altay (2009). The researchers also compared task-based and topic-based activities conducted with learners as a group. The researchres calculated the total number of turns taken during the sessions as well as the types of turns such as monosyllable, question, short and long turns. Overall, the results showed that there was a higher number of turns taken during task-based activities which carry the same features as convergent tasks.

These results also support the very first studies conducted by Duff (1986) and Long (1990) on divergent and convergent tasks. Duff (1986) compared the number of turns taken during a problem-solving task which she categorised as a convergent task with a discussion task which was defined as a divergent task by the researcher. In her study, although she analysed only the first five minutes of the dyad's talk, she found that there were significantly more turns generated during the convergent task than the divergent task. The results also showed that the total number of turns in problem-solving tasks nearly doubled the turns distributed in discussion tasks. Duff (1986) moreover resembled convergent tasks

to a tennis match in that the rhythm of turn-taking is quite faster compared to the divergent tasks which she stated to resemble a football match (p.18).

Long (1990) proposed two types of task, namely open and closed tasks by referring to the distinction made by Duff (1986) as divergent and convergent tasks. By open tasks, he meant that there are many acceptable solutions to the task while close tasks requires learners to reach one single solution. By referring to previous research, he hypothesised that closed tasks would produce more interaction either in pair or group work. He further claimed that during free conversation tasks such as open or divergent tasks, there was a high possibility of learners to show less engagement with the task, maybe even drop in case of an crisis. His claims were also supported by the findings of the study with regard to less engagement during the open nature tasks.

The results also support Fotos' (1994) suggestion that the combination of information-gap task with a closed outcome led to have the greatest interaction compared to the communicative tasks. Although the nature of the tasks she used was different from each other, i.e. she used grammar-consciousness tasks and communicative tasks, her findings regarding the closed outcome can feed the results of this study.

Gass, Mackey, and Ross-Feldman (2005) compared three different tasks, two of which had a required information exchange while the third had an optional information exchange task. The researchers concluded the tasks which had the required information exchange as in convergent tasks produced more interactional patterns than optional information exchange task which resembles that of divergent tasks.

Ellis (2003) also makes a distinction between required and optional exchange tasks as the former is similar to information-gap tasks, and the latter is related to opinion gap tasks. In required information exchange tasks, learners have different information to complete the task; and therefore, they have to exchange information with each other. On the other hand, in optional information exchange tasks, learners can interact with each other about the information they have, but they do not really have to do so. The results of the present study also support what Ellis' claims. Divergent tasks require optional information exchange

while in convergent tasks there is a required information exchange for learners to complete the task.

Total number of words. The results suggest that there is a task type effect on learners' production of target language words. Learners seemed to produce more words in convergent tasks than divergent tasks. The mean length of turn was also calculated and the results indicated that the mean length of turns was higher in divergent tasks than both of the convergent tasks. However, the mean difference between unstructured divergent and unstructured convergent tasks was observed to be higher than the mean difference between structured divergent and structured convergent tasks. Overall, these findings suggest that learners produced more turns and more words during convergent tasks; but the mean length of turns observed in convergent tasks was really small. This suggested that learners produced shorter turns such as one-word turns in convergent tasks. On the other hand, the results suggest learners produced extended turns in divergent tasks due to the fact that the mean length of utterance was bigger in divergent tasks.

These results are in line with Duff's (1986) findings. She observed that there were shorter turns during convergent tasks and more immediate feedback for the previous speaker's utterance as well. Additionally, these turns mostly included simple turns, which were also found in Altay's (2004) study. Duff also provided that during divergent tasks, extended discourse could be observed. She concluded that convergent tasks resulted in more words in total, which was also observed in the present study. She further explained that there were more words per turn during divergent tasks. The highest mean length of turn of divergent tasks supports Duff's findings.

Altay (2004) measured the turns by making a distinction between mono-syllable, short and long turns. The results in her study also showed that shorter turns were more frequent in task-based activities. Learners had much longer turns during the topic-based activities. She concluded that learners tended to produce more words in task-based activities than topic-based activities in overall.

In another study, Erten and Altay (2009) found similar results. The researchers provided that there were more turns taken during task-based activity

than topic-based activity. Moreover, they observed that learners produced a large proportion of short turns during task-based activity while they produced a large proportion of long turns during topic-based activity.

The findings of the current study also support the recently conducted study by Fujii, Ziegler and Mackey (2016). The researchers provided that closed outcome tasks such as convergent tasks could result in short lexical exchanges while open tasks such as divergent tasks might result in longer expressions of opinion (p.71).

Structuring was also observed to have an effect on the number of words. The mean length of turn was smaller in structured divergent task. This might be due to assigning group roles to the learners. Having roles might have caused the learners to have more real conversations by having much shorter turns during structured divergent tasks as of native speakers. Brown and Yule (1983 cited in Altay, 2004) stated that L1 speakers tended to produce short turns and chunks of language in their interactions even if they gave an academic or formal speech. Unstructured convergent tasks seemed to resemble the features of L1 speakers' interaction more compared to the structured convergent tasks during which learners tended to produce more words per turn. The unstructured convergent tasks might have been interpreted as real-life tasks defined by Nunan (1989) and therefore, learners tended to have more L1 similar interaction. On the other hand, assigning roles might have created an academic atmosphere during the convergent tasks. Learners seemed to have longer turns during the structured convergent tasks than unstructured convergent tasks. Additionally, it was not an intention to search for the overlaps during the interactions, but it was observed that learners tended to have more overlaps during the convergent tasks. However, they waited for other speakers to finish turns in order to initiate a turn in divergent tasks.

Tracking Collaborative Behaviours in L2 Task-Based Peer Interactions

A grounded qualitative analysis of the present data showed that a total of 13 collaborative behaviours were used in this particular context. These were grouped under two sets, namely language-related collaborative behaviours and task-related collaborative behaviours due to their scope. For instance, language-related

collaborative behaviours were observed to evolve around the resolution of comprehension issues between learners, to create opportunities for learning new language items in the emergent context. On the other hand, task-related collaborative behaviours evolved around the task-related issues such as keeping the learners on task, simplifying the task or the management the discussion in L2 or the successful completion of the task.

The rationale of data analysis method. A grounded qualitative approach was adopted to analyse the current data for the collaborative discourse moves since SCT has favoured detailed 'micro-genetic' analyses of dialogic interaction. There is also a need to conduct detailed analyses of the way how collaboration actually occurs (Ellis, 2003). SCT is interested in how cognition is mediated by language (L1, L2, etc.), including the development of L2 communicative abilities and also conceptual thinking, perceiving and representing things in the external world (Lantolf, 2011). Communicative interaction also mediates the development of concepts, conversational routines, cultural knowledge (van Compernolle, 2015, p. 13). Researchers in sociocultural paradigm, therefore, take an in-depth perspective on the qualities of interactions between teachers-learners and among learners to explore the ways in which interaction mediates L2 development (van Compernolle, 2015, p. 2).

From the point of sociocultural perspective, interaction has also been analysed as an opportunity for learners to scaffold each other and to collaborate in the resolution of their language-related problems. Ellis (2008) states that the term scaffolding has been replaced by new terms such as 'collaborative dialogue' (Swain, 2000) and 'instructional conversation' conversation (Tharp & Gallimore 1988, cited in Donato, 2000) due to its being reified into an object and its nature that makes it difficult to apply in peer-peer interactions. To investigate collaboration and collaborative dialogue, language-related episodes (LREs) were used as an analytic unit (Sato & Viveros, 2016) extensively. A review of studies that investigated mediating variables in peer interaction through the use of LREs was provided in the literature review chapter. Swain and Lapkin (1998) define language-related episodes as "any part of dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others" to what Swain (2006, p. 98) refers as "languaging". Through

the use of LREs which are seen as the sources of learning, learners build new knowledge by using language to think and talk about language (Fernández Dobao, 2016, p. 34).

SCT researchers is also concerned with how performance is dependent on the interaction of the individual and task (Appel & Lantolf, 1994) since the same task can result in different kinds of activities when performed by different learners as well as when performed by the same learners at different times, which is referred as 'Activity theory' (Lantolf & Thorne, 2006, p. 233). Sociocultural theory emphasizes that the activity deriving from a task is unstable, and it changes according to the specific goals and motives of the participants (Ellis, 2008, p. 822). Therefore, two key terms emerge from this view: task-as-workplan and task-in-process (Seedhouse, 2004). Seedhouse (2004) defines task-as-workplan as the intended pedagogy, the plan prior to classroom implementation of what participants will do as a teacher and learners. On the other hand, task-in-process is the actual pedagogy or what actually happens in the classroom. Empirical data is gathered from task-in-process, and it actually requires an emic perspective for investigating (Seedhouse, 2005) without bringing a prior categories. van Compernolle (2015, p. 200) also states that L2 interaction research drawing on Vygotskian psychology adopt a qualitative approach to data analysis and when external' or etic' coding schemes are applied to interactional data, there is the rick of understanding participants' orientations to the interactional phenomena in a misleading way.

The collaborative behaviours were, therefore, identified by using a grounded qualitative analysis through constant-comparison method rather than adopting LREs as an etic analytic unit to analyse collaboration in peer interactions unlike many of the SCT studies. Another reason was that although a categorisation of LREs was made (Garcia Mayo & Azkarai's, 2016; Ross-Feldman, 2007; Storch, 2008), identifying collaboration in line with a pre-established categories would limit the possible of collaborative behaviours since activities do change when performed by different learners as well as when performed by the same learners at different times (Lantolf & Thorne, 2006). Mercer (2004) also suggests that a static coding of utterances cannot grasp the dynamic nature of talk and it cannot show the ways through which meaning is constructed amongst

speakers, over time, through and in interaction. An advantage of such an approach to analyse talk as collective thinking is that actual talk is taken as the data throughout the analysis.

Collaborative behaviours identified in the current study. There were eight language-related collaborative behaviours which were labelled as a) provision of the word/phrase, b) reconstruction of others' turn, c) request for clarification, d) comprehension check, e) summary of the others' turn, f) request for explanation, g) request for information, h) provision of the L1 translation of the word/utterance. The task-related collaborative behaviours identified in the current study were a) pooling knowledge/ideas, b) encouragement for participation, c) task policing, d) simplification of the task, e) language policing. The definitions of each of the collaborative behaviours were provided in detail in Findings Chapter, where also extracts from the present study were used to illustrate how these collaborative moments occurred between learners.

To my current knowledge, there are only three studies (Beatty & Nunan, 2004; Erten & Altay, 2009; Gillies, 2006) which described collaborative strategies or students' verbal behaviours during learner interactions. In some studies, discourse moves were identified for example during collaborative dialogue (Zeng & Takatsuka, 2009) or in language-related episodes (Kos, 2013) or in collaborative learning environment (Johnson & Johnson, 2001). These collaborative discourse moves or strategies were related to either computer-mediated communication (Beatty & Nunan, 2004; Johnson & Johnson, 2001; Zeng & Takatsuka, 2009) or writing tasks (Kos, 2013). There was no mention of collaboration in Gillies' (2006) study. Erten and Altay (2009) was the only study which mentioned collaborative behaviors similar to the present study. However, the scope of the study was really small to catch all the collaborative behaviours that learners employed during task-based interactions.

The collaborative behaviours identified in the present study, however, shared some commonalities to the discourse moves defined in these studies (Balaman, 2016; Beatty & Nunan, 2004; Danli, 2011; Erten & Altay, 2009; Foster & Ohta, 2005; Gillies, 2006; Kos, 2013; Sato & Viveros, 2016) which investigated peer interactions.

Language-related collaborative behaviours. The first language-related collaborative behaviour ‘provision of the word/utterance’ shared commonalities with Erten and Altay (2009), Foster and Ohta (2005), Kos (2013), Sato and Viveros (2016). All of the studies include ‘completion’ in their definitions of this discourse move. In both Kos (2013) and Foster and Ohta (2005), there was also a mention of joint creation in which "more than one person chimes in to create an utterance". Sato and Viveros (2016) identified ‘collaborative sentence completion (CSC) as a form of collaboration in which a learner struggled to finish his utterance and another partner supplied the rest of the sentence. In addition to the definitions in these studies that involve completion, the instances when a learner asked an L2 equivalent of a word by using the first language were also included in this collaborative behaviour.

‘Reconstruction of others’ turn’ carried similarities to ‘other-correction’ identified by Foster and Ohta (2005) and Kos (2013). The researchers provided this strategy as a form of assistance and defined as a peer correcting his partner. In the present study, reconstructions appeared to take place either in the form of a correction of a single word or reformulating the partner’s word or a phrase to create a more clear meaning.

‘Request for clarification’ shared similarities to the strategies identified in Beatty and Nunan (2004), Erten and Altay (2009), Foster and Ohta (2005) and Gillies (2006). This collaborative behaviour was a combination of ‘explain text / task/ ideas’ which creates opportunities for negotiation of meaning and common understanding and ‘solicit clarification’ that helps negotiate meaning through request for additional information identified in Beatty and Nunan (2004). Erten and Altay (2009) named a collaborative turn as ‘clarification’ which involved clarifying or extending opinions or suggestions made by peers and clarifications offered by other partners. This collaborative behaviour was also a combination of what Foster and Ohta (2005) defined as confirmation checks and clarification requests. The employment of confirmation checks defined by the researchers as the whole of part of the previous utterance is repeated and a single confirmation is provided by the speaker resembled the employment of this collaborative behaviour in the current data. In addition, clarification requests were defined as eliciting clarification of the speaker’s previous utterance by asking questions. ‘Clarifications’ resemble

elaborations that involved extending other students' responses defined in Gillies (2006) and were referred by Erten and Altay (2009) as well.

'Comprehension check' was similar to one of the three Cs defined by Foster and Ohta (2005) as "any expression designed whether that speaker's previous utterance had been understood by the interlocutor". In the present study, the instances when the current speaker used an expression to understand whether his or her previous utterance had been understood by the other learners in the group were defined as 'comprehension check'.

'Summary of the others' turn' was not mentioned to my knowledge in any of the studies that inverstigated learner interactions. This collaborative behaviour was observed when an interlocutor provided a summary of what had been previously told by the previous speaker. Therefore, it functioned to make other learners in the group understand what the previous speaker had previously uttered.

'Request for explanation' was similar to 'request for explanation' which was provided as an assistance seeking strategy and defined as an initiation of a request such as explanations or opinions from a partner in Kos (2013). Similarly, this collaborative behaviour was initiated when a partner asked for an explanation of the previous speaker's utterance in the present study. The collaborative behaviour explained here was found to be similar to Gillies categorisation (2006) of 'elaborations', which helped providing solicited explanations and open type questions.

'Request for information' shared similarity to what Kos (2013) named as a request for information as well. Kos (2013) classified request for information as another strategy of seeking assistance which helped elicit lexis, morphosyntax or spelling. In the present study, similarly, this collaborative move was initiated when a learner elicited the meaning of an L2 word, extra information or L2 translation of an utterance. In the case of a lexical item, this collaborative behaviour was followed by translation to L1, provision L2 synonym or explanation with body language. Rarely, the learners used L2 to explain the meaning of the word.

The last language-related collaborative behaviour was labelled as 'provision of the L1 translation of the word/utterance'. This collaborative behaviour was usually observed when the current speaker used a word or a phrase after

checking the online dictionary. The speaker provided the word or the utterance in a quiet voice in L1 just after she/he finished her/his utterance in L2. This was initiated by the speaker without getting any request for information or clarification from the other learners. In the relevant literature, no correspondence was found to this collaborative behaviour.

Task-related collaborative behaviours. The first task-related collaborative behaviour 'pooling knowledge/ideas' was observed when the current speaker finished his/her utterance, other learners expanded his/her idea by adding more information to what he/she had previously given. The reason of having such behaviour might be the nature of working collaboratively as a group. No correspondence was found to this collaborative behaviour in the relevant literature.

'Encouragement for participation' was observed when an interlocutor refrained from taking turns during the discussions due to the usage of an incorrect word or the claim that they could not find any idea regarding the task. In addition, a learner sometimes interrupted his/her partner's speech who took less turns when compared to the other learners in the group. In this case, a third interlocutor in the group encouraged the current speaker to relax and to continue his/her speech. This was sometimes done by using an explicit announcement such as 'X is speaking'.

This collaborative behaviour carried similarities to what was provided in the related literature. For example, this strategy is a combination of 'direct attention', 'solicit suggestions/support' and 'signal interest in / show support for other's ideas' in Beatty and Nunan (2004). The authors defined 'direct attention' as involving the partner in what is done. On the other hand, 'solicit suggestions / support' was defined as directly asking for partner's involvement. In the present study, however, there was not always a direct and explicit request to invite partners in the discussion. The learners showed an interest in the current speaker's speech by hinting an indirect request for participation in the conversation. Lastly, 'signal interest in / show support for other's ideas' was defined as the help to indicate a common direction in what learners are doing or discussing. In addition, the collaborative behaviour defined in the current study was a combination of 'frustration control' and 'recruitment' defined in Danli (2011). The author defined 'frustration control' as helping control frustration and reducing stress while

‘recruitment’ involved drawing learners’ attention to the task and engaging their interest in the task. Additionaly, Foster and Ohta (2005) and Kos (2013) provided ‘continuer’ as an instance in which a partner takes interest in the speaker’ talk and encourages him to continue. Foster and Ohta (2005) discussed ‘continuers’ with reference to confirmation checks, but in the present study, encouragement was not provided as a response to confirmation checks.

‘Task policing’ was initiated when the current speaker started to talk about something irrelevant to the task. In those instances, other learners in the group directed the speaker to focus on the task. This collaborative turn shared similarities in other studies (Danli, 2011; Erten & Altay, 2009; Gillies, 2006). Danli (2011) suggested ‘direction maintenance’ was more relevant to task policing in the current study. Erten and Altay (2009) named this collaborative act as invitation which involves requesting partners to focus on the activity when they wander away from the subject. Gillies (2006) similarly provided ‘directs’ which aims to discipline other learners in order to focus attention.

‘Simplification of the task’ was initiated when a participant did not understand what was required to do in the task and asked for an explanation in the current study. Other participants in the group either simplified the task by changing the words with more frequent words or by using the first language. This collaborative behaviour was similar to ‘explain text / task / ideas’ defined in Beatty and Nunan (2004). The researchers mentioned that this collaborative strategy created a common understanding just after the explanation of the task similar to the present study. Kos (2013) also categorised ‘explanations’ which were instances during which learners explained language or task-related issues. ‘Simplification’ in the present study resembled to Kos’ reference to task-related issues. Danli (2011) also provided a function of scaffolding as ‘simplifying the task’ which perfectly fits into what was described and provided in the present study. Sato and Viveros (2016) distinguished the interaction where learners identified and analysed the task rather than linguistic issues in their study. The moments where learners evolved around the task-related issues were coded as task-related collaboration.

The last task-related collaborative behaviour was labelled ad ‘language policing’ which was frequently employed when the participants used L1 during

their interactions. When the learners showed a heavy reliance on the use of L1, other learners asked the speaker to use L2 to explain his ideas. Language policing was mainly used in conversation analytic studies. For example, Amir and Musk (2013) defined language policing as the "explicit orientation and attempt to reestablish the monolingual policy". Balaman (2016) found that learners oriented to a pre-assigned L2 use rule in online task-based learner interactions. Although the learners were not instructed provide any rule regarding the use of L2 during their interactions, they co-constructed this rule as the interactions were unfolded. Balaman (2016) also drew attention to this policing was observed in task-oriented contexts. In addition, 'language policing' resembles to Gillies' directs (2006) in terms of giving direction.

Although Fernandez-Dobao (2016) suggests that teachers should supervise to provide appropriate feedback and assistance during small group work, the collaborative behaviours identified in the present study showed similarities teacher-mediation strategies identified in Dao and Iwashita (2018). The authors found that the teacher provided both task-related assistance and language mediation in varying degrees. Task-related assistance involved task issues such as modelling, task clarification, direction and eliciting, which are similar to collaborative behaviours employed by peers during L2 task-based interaction in the current study.

The Most Frequently Employed Collaborative Behaviours in the Present Study

Overall, language-related collaborative behaviours were more frequently observed in the present study than task-related collaborative behaviours. The most five frequently observed collaborative behaviours were 'provision of the word/phrase', 'request for clarification', 'request for information', 'reconstruction of other's turn and request for explanation'. These five collaborative behaviours accounted 78.22% of the total collaborative behaviours identified in the study. Of the 13 collaborative behaviours, the least frequently employed collaborative behaviours were 'task policing', 'simplification of the task', 'language policing', 'comprehension check', 'encouragement for participation' and 'summary' in overall. Except from 'comprehension check' and 'summary', the remaining strategies were

identified as task-related collaborative behaviours. Although it is not the least frequently employed collaborative behaviour, 'language policing' was among the least frequently employed collaborative behaviours. This suggests that learners either did not resort to L1during or they accepted the use of L1 during their discussions. Balaman (2016) found that in online task-oriented learner interactions, learners did attend to a pre-established L2 use only rule as well as co-constructing new rules regarding the use of L2. Balaman (2016) also drew attention that this policing was observed in task-oriented contexts by referring to other studies that focused on policing on language use (Amir & Musk, 2013; Hazel, 2015; Sert, 2015). Based upon these studies, since the context of the study also involved a task-oriented environment, learners employed language policing during the instances of L1 use rather than accepting L1 use in their interactions. Still, L1 usage is seen an effective mediation tool from the perspective of sociocultural theory (Antón & DiCamilla, 1998; Davin & Donato, 2013; Donato, 1994; Swain, 2000; van Compernolle, 2015). However, a close investigation into the use of L1 in the present data can present more robust conclusions.

To my knowledge, there is only one study which distinguishes between language-related and task-related collaboration between peers (Sato & Viveros, 2016). The researchers found that both low proficiency and high proficiency level learners engaged in more task-related collaboration than language-related collaboration. Therefore, the results of the current study do not match support the findings of what Sato and Viveros (2016) found in the study. Although speaking tasks were assigned in the study, the types of the activities might have had an effect on the increase of task-related collaboration in this particular study. The activities were designed to shift learners' attention to a particular past-tense form as they completed the activities. However, in the present study, the conversation tasks were assigned in the form of a convergent and divergent task (Duff, 1986). Other reason could be attributed to the learners' proficiency in Sato and Viveros (2016). The researchers formed a group of five low proficiency learners and a group of five high proficiency learners and compared the interactions of those groups. The studies that investigated proficiency level and LREs showed that as the proficiency increases, the number of LREs increase as well (Choi & Iwashita, 2016; Kim & McDonough, 2008; Leeser, 2004; Watanabe & Swain, 2007).

Involving different proficieny learners in the study could have affected learners' use of collaboration in Sato and Viveros (2016).

In terms of individual language-related collaborative behaviours, the more frequently employed language-related collaborative behaviours were 'provision of the word/phrase', followed by 'request for clarification' and 'request for information'. The frequency of 'provision of the word/utterance' and 'request for information' accounted 50.28% of the total language-related collaborative behaviours. The least frequently observed language-related collaborative behaviours were 'provision of the L1 translation of the word/utterance', followed by 'comprehension check' and 'summary of others' turn'. The learners' proficiency levels were the same for each group. Therefore, the frequency of 'summary' as the least collaborative behaviour could be due to the learners' same proficiency level because the use of this collaborative behaviour was mostly provided by experts (e.g. TUG). During the group discussions, some learners act more of an expert, but it is still possible to see *collective scaffolding* (Donato, 1994) in which learners both act as novices and experts.

With regard to individual task-related collaborative behaviours, the most frequently employed task-related collaborative behaviours were 'pooling', followed by 'task policing' and 'simplification of the task'. The least frequently task-related collaborative behaviours were 'language policing' and 'encouragement'.

The research context in which learners participated in as a group seemed to create a collaborative mindset in that learners' more frequently employed 'pooling' during the interactions. To infer possible reason for collaborative mindset between learners, referring to social interdependence theory may be useful. Social interdependence theory is based on the idea that the social relationship between group members and psychological processes experienced while engaging in group tasks are independent variables that could affect learning outcomes. The theory emphasizes the positive interdependence on achievement when people form a group (Sato & Viveros, 2016). This social relationship emerges when learners perceive that they can accomplish their goals if and only if other learners with whom they are working collaboratively linked (Johnson & Johnson, 2009). Based upon this theory, the results suggest that learners in the groups created a

sense of positive interdepence and created a collaborative mindset while working on the given tasks.

Donato (2004) suggests that interaction does not necessarily lead to or mean collaboration (Storch, 2002). The results show that task-based interaction in the particular study created a collaborative environment and worked together (Blum-Kulka & Snow, 2004) in that learners employed a variety of collaborative behaviours.

The Effect of Task Types on Collaborative Behaviours

Overall, an effect of task type was observed on learners' use of collaborative behaviours. The overall collaborative behaviours were more frequently employed in convergent tasks. Language-related collaborative behaviours were also more frequently observed in convergent tasks. On the other hand, task-related collaborative behaviours were more frequently employed in divergent tasks.

These results support the results of previous studies that investigated convergent tasks with a closed outcome (Duff, 1986; Erten & Altay; 2009; Fotos, 1994; Gillies, 2004; Gillies; 2006; Long; 1990). In regard to language-related episodes, it was found that tasks with a closed outcome generated more language-related episodes (Alegria de la Colina & Garcia Mayo, 2007; Garcia Mayo, 2002; Storch, 2001).

Individual collaborative behaviours showed a difference in frequency between divergent and convergent tasks. The language-related collaborative behaviours, namely 'provision of the word/utterance', 'request for clarification', and request for explanation' were more frequently observed in convergent tasks. Since the nature of convergent tasks requires learners to come to a single solution (Duff, 1986); learners seemed to contribute to each other's turns with more provisions, which contradicts with what Swain and Lapkin (2001) suggested as open tasks can lead to more lexical-related episodes. Erten and Altay (2009) also found the collaborative act 'completion' that shares commonalities with 'provision' was more frequently employed in topic-based activities that resemble divergent tasks.

The learners employed more request for clarification and explanation in convergent tasks in the current study probably due to the nature of these tasks. While making a decision as a group, all the uncertainties should be resolved between interlocutors. Similarly, Erten and Altay (2009) found a significant difference in the amount of 'clarification' between task-based and topic-based group activities. Learners more frequently employed 'clarification' in task-based group activities than topic-based group activities.

On the other hand, the language-related collaborative behaviours such as 'request for information', 'reconstruction', 'provision of the L1 translation', 'summary' and 'comprehension check' were more frequently employed in divergent tasks. Due to the extended turns produced in divergent tasks might have enabled learners to use 'reconstruction', 'provision of the L1 translation', 'summary' and 'comprehension check' more. As the learners produced more words, the comprehensibility of their sentences might have decreased. Therefore, by using these collaborative behaviours, learners resolved the language-related comprehension problems. 'Request for information' was estimated to occur more in convergent tasks, however it was more frequently observed in divergent tasks. Since the engagement in convergent tasks seems to reflect the features of native-speaker interaction (Brown and Yule, 1983 cited in Altay, 2004), learners can produce more negotiation strategies such as three 3 Cs defined by Foster and Ohta (2005) in those tasks. 'Request for information' defined in the present study is not a negotiation strategy employed by the learners.

With regard to task-related collaborative behaviours, 'task policing', 'language policing' and 'encouragement' were more frequently employed in convergent tasks. The learners might have used these collaborative strategies to create a positive interdepence during their interactions. They would need to work cooperatively to attain the goal, e.g. completing the task in this situation, because the given task required each participant's contribution for successful completion. Task policing did not show a big difference between divergent and convergent tasks, but the frequencies of language policing and encouragement for participation were far more frequent in convergent tasks.

The other two task-related collaborative behaviours namely 'pooling' and 'simplification' were more frequently observed in divergent tasks. These results do

not support what Erten and Altay (2009) found that invitation that resembles encouragement was observed more in topic-based activities.

The Effect of Structuring on Learners' Collaborative Behaviours

Group structuring was observed to have an impact on the frequency of collaborative behaviours. Overall, collaborative behaviours were more frequently observed in unstructured tasks. With regard to each of the collaborative behaviours group, language-related collaborative behaviours were more frequently employed in unstructured tasks. On the other hand, task-related collaborative behaviours were more frequently employed in structured tasks. These findings suggest that assigning group roles during the task-based interactions led to more task and group management collaborative behaviours.

These results provide rather contradictory findings to the previous research on the effectiveness of structuring groups (Aslan, 2015; Gillies, 2003; Gillies & Boyle, 2010; Slavin, Hurley & Chamberlein, 2003; Webb et al., 2009). Aslan (2015) observed that structured group work generated more collaborative behaviours and group performance than unstructured group work. In addition, she found that the outcomes of structured group work yielded better results in terms of learners' vocabulary development, written products. Moreover, learners in structured groups had more positive attitudes towards working in structured groups. Gillies (2003) provide that placing learners in groups does not necessarily promote cooperation between learners, which was also suggested by Donato (2004) in that interaction does not necessarily lead to or mean collaboration (Storch, 2002). For example, Storch found that not all learners in pairs do work collaboratively when assigned to work on language tasks. Learners intentionally avoid negotiation of meaning and do not indicate nonunderstanding due to face saving during peer interactions. They rather guess what others are trying to say by referring to shared L1 and common context (Philp et al., 2014, p. 48). Collaboration between peers may be strongly associated with personality combinations, perceptions of self and other, past histories, and experiences (Kim & McDonough, 2008; Storch, 2002; Watanabe & Swain, 2008). Gillies (2003) suggest that learners benefit from working together only when groups are structured so that learners create a sense of group identification and psychological

interdepence since the social dynamics of peers in groups or pair interactions greatly affect learners' ability to profit from each other (Sato & Ballinger, 2016, p. 19). This also reduces the free-loading effect (Gillies, 2003).

In the present study, groups were structured by assigning group roles (Philp et al., 2014). The roles chosen for the given tasks may have not been appropriate for an effective collaborative environment because Dörnyei (2007) says that the nature of the tasks require some specific roles. Moreover, the role training was provided for the learners since explicitly marked roles have the advantage of preparing learners to perform the roles effectively (Dörnyei, 2007). Dörnyei and Murphey (2003, p. 110) state that roles may emerge naturally among the members (informal roles), or teachers might encourage learners to adopt the roles that suit them best for strategies and activities (assigned roles). The assignment of the roles was done randomly in the current study. Therefore, the nature of the roles may not have been proper to the learners' charasterictics because Dörnyei (2007) states if learners are given the right role, they will become useful members of the team, and vice versa.

With regard to individual language-related collaborative behaviours, five language-related collaborative behaviours were more frequently observed in structured tasks. These were 'provision', 'request for information', 'provision of the L1 translation', 'comprehension check' and 'summary'. On the other hand, the other three language-related collaborative behaviours, namely 'request for clarification', 'reconstruction' and 'request for explanation' were more frequently observed in unstructured tasks. In structured tasks, having roles may have attributed equal power relations to the learners since it has been suggested that some members could become more active and influential than others because small group tasks tend to develop hierarchies (Cohen & Lotan, 2014, p. 28). For example, while requesting information, information seeker has a non-dominant role while information giver has a dominant role (Yule & MacDonald, 1990). However, request for information were more frequently employed in structured tasks.

With regard to the task-related collaborative behaviors, 'task policing' and 'simplification' were more frequently employed in structured tasks. The other three task-related collaborative behaviours, namely 'pooling', 'language policing' and

‘encouragement’ were more frequently employed in unstructured tasks. These results suggest that a more collaborative environment was created in unstructured tasks because they more frequently employed ‘pooling’ in unstructured tasks.

Although Cohen and Lotan (2014) suggests that such groups in which members are provided a specific roles and a list of expected behaviours can work efficiently and productively, the current findings do not support this idea. The reason could be that some conflicts may have arisen among learners due to the dynamic nature of the groups (Dörnyei & Murphey, 2003). The sources of these conflicts can be due to a number of reasons such as communication difficulties, disagreements over how the task will be done, the leader’s inappropriate leadership style and so on (Dörnyei & Murphey, p. 136). Moreover, Gillies and Boyle (2010) suggest that successful group work needs careful implementation and preparation. This involves the construction of the tasks in which learners create a sense of ‘positive interdependence’ to complete the task collaboratively. The tasks used for the structured tasks may have failed to invest in this feeling in the learners. Cohen and Lotan (2014) also suggest that different group work tasks require different cooperative behaviours. The choice of the group roles should also be carefully conducted.

Conclusion

In the light of the research questions, this dissertation had shed light on the effect of task types and assigning group roles on learners’ collaborative behaviours in L2 task-based peer interactions. Throughout the study, a complementary qualitative and quantitative analysis was employed to investigate both variables.

This section of the study will provide the methodological and pedagogical implications regarding the current study. Based on the implications provided in this section, suggestions for possible future research will be provided.

Methodological implications. The limitations of the study with its methodology have been provided in the Chapter 1. By referring to these limitations, some methodological implications will be provided for the researchers who would like to investigate peer interactions in similar research design.

A pre-experimental one-group time-series research design has been adopted in the current study. Therefore, there were many independent variables that could possibly have an impact on the results. Some measurements on learner individual differences can be conducted to comment on the results if a significant difference is observed among learners.

Although pre-experimental research design requires the regular intervals between sessions, the intervals between data sessions had to be changed due to the learners' and researcher's agenda. Therefore, a more rigid time-table before the data collection could help have same intervals between sessions.

The study was conducted outside of the real classrooms due to the unavailability of only peer interactions in the regular classrooms. Therefore, the motivation of the learners in group discussion in the classrooms and outside of the classrooms could bring different results. Also, the history effect can be more effectively controlled in real classrooms. Besides, some rewards can be given to the learners to avoid the history effect during the data collection process.

A learning focus could be integrated to the given tasks. This may involve a set of lexical items, a grammatical focus or a conversational expression. The development of these can be traced across sessions.

A supplementary research tool such as an interview can be employed to understand learners' attitudes towards working as a group or assigning group roles. After each task, an interview can also be integrated to understand learners' views on the given tasks.

A more structured training on the roles can yield better results. Therefore, the roles can be practised for a couple of times to minimize the side effect of improper role training.

The collaborative behaviours in this study have been marked as collaborative instances in which one type of collaborative behaviour was employed in learners' interactions. It would be a better idea to conduct a turn-by-turn analysis to mark the discursive strategies that learners employed to initiate such instances and resolve them. This would also help see how many learners actively participate in collaborative moments. Participation does not only require the production, but can involve also other form of participation as 'active reception' (van Compernolle

& Williams, 2013). Non-verbal interaction such as gestures or body language could be included in the analysis. Second, a follow-up interview could be conducted with learners on the topic choice and their views on the group roles to have a more in-depth analysis of their beliefs about working as a group.

Pedagogical implications. The results of the present study also provide some implications for the classrooms and for the teacher training. In regard to classrooms, teachers are advised to employ peer interactions in their classrooms. The interactions between peers support the view that learners work collaboratively when assigned to learner groups. They can create a collaborative mindset and collaboratively co-construct knowledge and solve their language-related and task-related problems.

Although the positive effect of structuring was not fully supported in the current study, there were still more collaborative behaviours employed by the learners. For example, Aslan (2015) conducted an action research in her classrooms with young learners. She provided that as the teacher and researcher in her own classrooms, there was a lack of structuring in group work, which was also supported by her colleagues. Therefore, teachers should be encouraged to employ group structuring in learner interactions.

In regard to teacher training, language teachers should be provided training on how to design groupwork because assigning learners into groups and telling them to work together do not always yield effective results. Therefore, the syllabus of special teaching methods courses can be revised for enabling to train pre-service teachers on designing and implementation of group work. A week in practicum courses can be allocated for activities to design group work as well.

Suggestions for Further Research

This study could be conducted in real classrooms and the tasks would be chosen from the curriculum. In this way, learners' performances in real classrooms can be observed. By choosing the tasks from the curriculum, the background knowledge such as topic familiarity can be ensured since there is a great amount of research that suggest more elaborate discourse can be elicited by the familiarity of learners with the topic.

This study unfortunately lacks the views of learners on the procedure about the study. Therefore, an interview can be integrated into the research methodology to understand learners' opinions and attitudes towards working as a group and the types of activities. Additionally, more in-depth insights can be obtained from the learners for practising group roles during their interactions. Similarly, their opinions about the roles and the effectiveness of them can be obtained by conducting an interview with the learners.

This study dealt with speaking tasks, so it could be a good idea to conduct the same study with writing tasks to see whether learners will employ the same collaborative behaviours. The interaction emerged from these writing tasks could be investigated in terms of collaborative behaviours and compared to that of speaking tasks as done in previous research (García Mayo & Azkarai, 2016; Niu, 2009).

Although homogenous groups in terms of proficiency level were formed for the current study, comparing heterogeneous groups might provide different results in terms of collaborative behaviours as previous researchers found different results (Choi & Iwashita, 2016; Kim & McDonough, 2008; Kos, 2013; Leeser, 2004; Sato & Viveros, 2016; Storch, Aldosari, 2013; Watanabe & Swain, 2007; Williams, 1999; Young & Tedick, 2016).

The collaborative behaviours displayed in pairs and in groups could be compared as well since the number of participants was found to have an effect on learners' collaboration (Fernandez Dobao, 2012; 2014a; 2014b; Garcia Mayo & Zeither, 2017; Lasito & Storch, 2013).

This study was conducted with adult learners, and the results can be different with young learners (Aslan, 2015). Therefore, the same study can be replicated with younger learners to see whether different collaborative behaviours are employed by those learners.

Last but not least, the role and functions of codeswitching in scaffolding or collaborating to solve problems can be investigated in depth since the learners used a great amount of their first language during their interactions. An initial evaluation suggests that the use of codeswitching has different purposes.

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APPENDIX-A: Consent Form

Sayın Katılımcı,

Katılmış olduğunuz çalışma, doktora tezi araştırmamda kullanılmak üzere Hacettepe Etik Komisyonu tarafından etik onayı verilen akranların grup çalışmaları süresince yabancı dilde görev temelli konuşma verilerinin kullanılmasını içermektedir. Bu bağlamda, çalışmaya katılmak için gönüllü olan diğer katılımcılarla 5'erli gruplar halinde verilen farklı görevleri öğrenmiş ve/veya öğreniyor olduğunuz yabancı dilde (İngilizce) konuşarak çözmeniz istenecektir. Bu esnada yapacağınız konuşmalar ses ve görüntü kayıt cihazlarıyla kaydedilecek ve araştırma soruları kapsamında incelenecektir. Dilediğiniz takdirde görüntü kayıtlarındaki yüzleriniz buğulandırılacaktır. Çalışma uygulamaları başlamadan önce sizlerin demografik bilgileriniz (yaş, cinsiyet gibi) sorulacak ve kişilik, kaygı ve belirsizliğe karşı hoşgörülü olma gibi ölçekleri doldurmanız istenecektir. Çalışmaya katılımınız tamamen gönüllülük esasına dayanmalı ve çalışmaya katılmanız için hiçbir zorunluluk bulunmamaktadır. Çalışma esnasında sizi rahatsız edecek herhangi bir durumla karşılaşmanız durumunda istediğiniz zaman yardım talep edebilir ya da çalışmadan istediğiniz zaman çekilmekte serbestsiniz.

İşbu metinle yapılan kayıtların herhangi bir üçüncü bir şahıs veya grupla araştırma amacı dışında paylaşılmayacağını temin ederim. Kişisel bilgileriniz gizli tutulacak ve basılmış ya da çevrimiçi yayınlanmış herhangi bir belgede açık olarak verilmeyecektir. Kayıtlar yalnızca araştırma amaçlı olmak üzere ilgili araştırmacı ve veriye akademik katkı sunacak araştırmacılar tarafından kullanılacaktır. İş belgeyi, ilgili prosedürü onaylıyor ve kayıtlarınızın araştırmacı(lar) tarafından kullanımına izin veriyorsanız lütfen imzalayınız.

Saygılarımla.

Kadriye Aksoy
Araştırma Görevlisi
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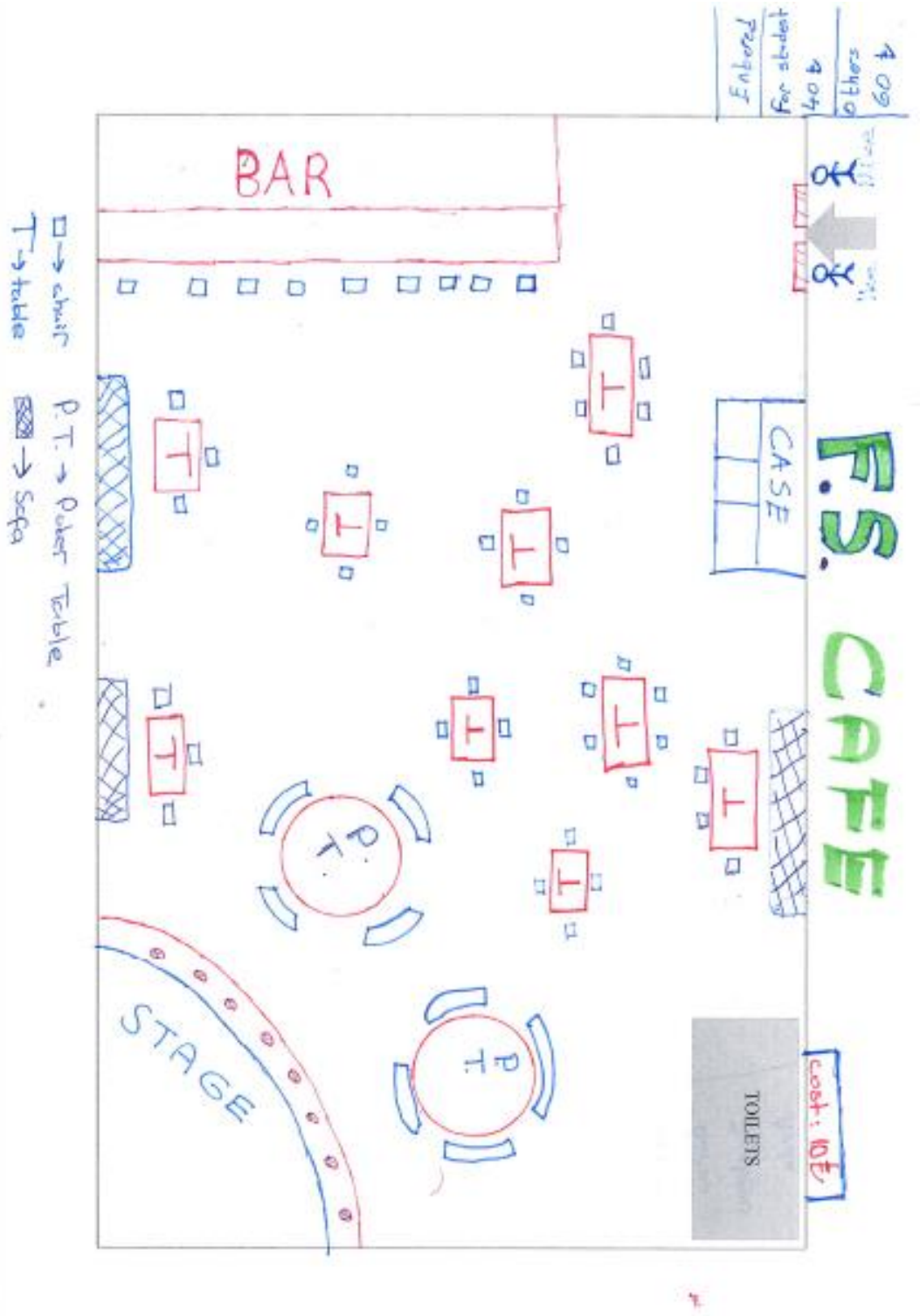
kadriyeaksoy@yahoo.com

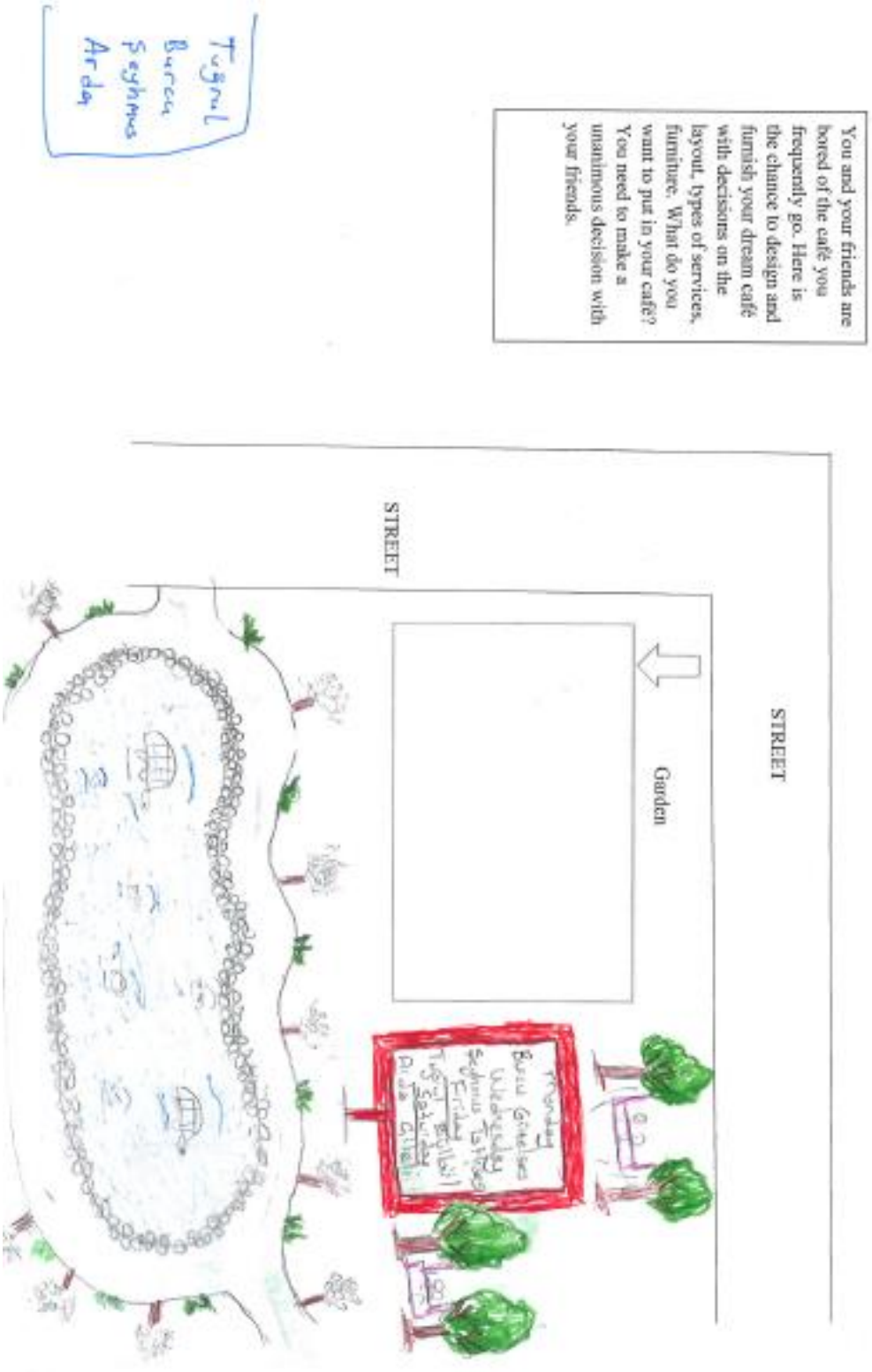
Yukarıda anlatılan çalışmaya grup çalışması içerisinde katılacağımı, grupların oluşturulması için çalışma öncesinde ölçek dolduracağımı, çalışma esnasında ses ve görüntü kaydı yapılacağını, kaydedilen görüntülerin isteğim takdirde buğulandırılıp kullanılacağını, rahatsızlık hissettiğim zaman çalışmadan çıkabileceğimi ve araştırmacıyla paylaşmış olduğum tüm kişisel bilgilerimin gizli tutulacağını anlamış bulunuyorum. Bu belgeyle, çalışmaya gönüllü olarak katılacağımı beyan ederim.

Tarih:
Ad-Soyad:
Telefon:
E-posta:
İmza

APPENDIX-B: The Completed Version of Unstructured Convergent Task 1- Front Face



APPENDIX-C: The completed version of Unstructured Convergent Task 1- Back Face



APPENDIX-D: The Worksheet for Role Assignment

Possible Roles on Teams

Facilitator: Moderates team discussion, keeps the group on task, and distributes work.

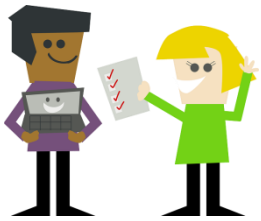
Timekeeper Keeps the group aware of time constraints and deadlines and makes sure meetings start on time.

Recorder: Takes notes summarizing team discussions and decisions, and keeps all necessary records.

Reporter Serves as group spokesperson to the class or instructor, summarizing the group's activities and/or conclusions.

Devil's Advocate Raises counter-arguments and (constructive) objections, introduces alternative explanations and solutions.

Checker Checks to make sure all group members understand the concepts and the group's conclusions.



APPENDIX-E: Jefferson's (2004) Transcription Notation

Symbol	Name	Use
[text]	Brackets	Indicates the start and end points of overlapping speech.
=	Equal Sign	Indicates the break and subsequent continuation of a single interrupted utterance.
(# of seconds)	Timed Pause	A number in parentheses indicates the time, in seconds, of a pause in speech.
(.)	Micropause	A brief pause, usually less than 0.2 seconds.
. or ↓	Period or Down Arrow	Indicates falling pitch.
? or ↑	Question Mark or Up Arrow	Indicates rising pitch.
,	Comma	Indicates a temporary rise or fall in intonation.
-	Hyphen	Indicates an abrupt halt or interruption in utterance.
>text<	Greater than / Less than symbols	Indicates that the enclosed speech was delivered more rapidly than usual for the speaker.
<text>	Less than / Greater than symbols	Indicates that the enclosed speech was delivered more slowly than usual for the speaker.
°	Degree symbol	Indicates whisper or reduced volume speech.
ALL CAPS	Capitalized text	Indicates shouted or increased volume speech.
underline	Underlined text	Indicates the speaker is emphasizing or stressing the speech.
:::	Colon(s)	Indicates prolongation of an utterance.
(hhh)		Audible exhalation
? or (.hhh)	High Dot	Audible inhalation
(text)	Parentheses	Speech which is unclear or in doubt in the transcript.
((italic text))	Double Parentheses	Annotation of non-verbal activity.

APPENDIX-F: Ethics Committee Approval

T.C.
HACETTEPE ÜNİVERSİTESİ
Rektörlük

Sayı : 35853172/ 433-2194

13 Temmuz 2015

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi: 29.06.2015 tarih ve 1213 sayılı yazınız.

Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı bütünleşik doktora programı öğrencilerinden **Kadriye AKSOY**'un öğretim üyesi **Doç. Dr. İsmail Hakkı ERTEN**'in danışmanlığında yürüttüğü **"Görev Temelli Grup Çalışması Konuşmalarında Grup Dinamiklerinin Mikro Analizsel İncelenmesi"** konulu araştırma, Üniversitemiz Senatosu Etik Komisyonunun **07 Temmuz 2015** tarihinde yapmış olduğu toplantıda incelenmiş olup, etik açıdan uygun bulunmuştur.

Bilgilerinizi rica ederim.

Prof. Dr. Ömer UĞUR
Rektör a.
Rektör Yardımcısı

Ek: Tutanak

APPENDIX-G: Declaration of Ethical Conduct

I hereby declare that…

- I have prepared this thesis in accordance with the thesis writing guidelines of the Graduate School of Educational Sciences of Hacettepe University;
- all information and documents in the thesis/dissertation have been obtained in accordance with academic regulations;
- all audio visual and written information and results have been presented in compliance with scientific and ethical standards;
- in case of using other people's work, related studies have been cited in accordance with scientific and ethical standards;
- all cited studies have been fully and decently referenced and included in the list of References;
- I did not do any distortion and/or manipulation on the data set,
- and **NO** part of this work was presented as a part of any other thesis study at this or any other university.

19 / 07/ 2018

K. Aksoy

Kadriye AKSOY

APPENDIX-H: Dissertation Originality Report

19 / 07/ 2018

HACETTEPE UNIVERSITY

Graduate School of Educational Sciences

To The Department of Foreign Language Education

Thesis Title : AN INVESTIGATION INTO COLLABORATIVE BEHAVIOURS IN TASK-BASED FOREIGN LANGUAGE PEER INTERACTIONS

The whole thesis that includes the *title page, introduction, main chapters, conclusions and bibliography section* is checked by using **Turnitin** plagiarism detection software take into the consideration requested filtering options. According to the originality report obtained data are as below.

Time Submitted	Page Count	Character Count	Date of Thesis Defence	Similarity Index	Submission ID
19 /07 /2018	232	380,224	20 /06/ 2018	14%	959689258

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I declare that I have carefully read Hacettepe University Graduate School of Educational Sciences Guidelines for Obtaining and Using Thesis Originality Reports; that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

I respectfully submit this for approval.

Name Lastname: Kadriye AKSOY

Student No.: N11162550

Department: Foreign Language Education

Program: English Language Teaching

Status: ☐ Masters ☐ Ph.D. ☒ Integrated Ph.D.

K. Aksoy

Signature

ADVISOR APPROVAL

APPROVED

(Prof. Dr., İsmail Hakkı ERTEN)

APPENDIX-I: Doktora Tez Çalışması Orijinallik Raporu

19/07/2018

HACETTEPE ÜNİVERSİTESİ
Eğitim Bilimleri Enstitüsü
Yabancı Diller Eğitimi Ana Bilim Dalı Başkanlığına,

Tez Başlığı : YABANCI DİLDEKİ GÖREV TABANLI AKRAN ETKİLEŞİMİNDE İŞBİRLİKÇİ DAVRANIŞLAR ÜZERİNE BİR ARAŞTIRMA

Yukarıda başlığı verilen tez çalışmamın tamamı (kapak sayfası, özetler, ana bölümler, kaynakça) aşağıdaki filtreler kullanılarak **Turnitin** adlı intihal programı aracılığı ile kontrol edilmiştir. Kontrol sonucunda aşağıdaki veriler elde edilmiştir:

Rapor Tarihi	Sayfa Sayısı	Karakter Sayısı	Savunma Tarihi	Benzerlik Oranı	Gönderim Numarası
19 /07/2018	232	380,224	20 /06/ 2018	%14	959689258

Uygulanan filtreler:

1. Kaynaklar hariç
2. Alıntılar dâhil
3. 5 kelimeden daha az örtüşme içeren metin kısımları hariç

Hacettepe Üniversitesi Eğitim Bilimleri Enstitüsü Tez Çalışması Orijinallik Raporu Alınması ve Kullanılması Uygulama Esasları'nı inceledim ve çalışmamın herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan eder, gereğini saygılarımla arz ederim.

Ad Soyadı: Kadriye AKSOY
Öğrenci No.: N11162550
Ana Bilim Dalı: Yabancı Diller Eğitimi
Programı: İngiliz Dili Eğitimi
Statüsü: ☐ Masters ☐ Ph.D. ☒ Integrated Ph.D.

İmza

DANIŞMAN ONAYI

UYGUNDUR.
(Prof. Dr., İsmail Hakkı ERTEN)

APPENDIX-J: Yayımlama ve Fikri Mülkiyet Hakları Beyanı

Enstitü tarafından onaylanan lisansüstü tezimin/raporumun tamamını veya herhangi bir kısmını, basılı (kâğıt) ve elektronik formatta arşivleme ve aşağıda verilen koşullarla kullanıma açma iznini Hacettepe Üniversitesine verdiğimi bildiririm. Bu izinle Üniversiteye verilen kullanım hakları dışındaki tüm fikri mülkiyet haklarım bende kalacak, tezimin tamamının ya da bir bölümünün gelecekteki çalışmalarda (makale, kitap, lisans ve patent vb.) kullanım haklan bana ait olacaktır.

Tezin kendi orijinal çalışmam olduğunu, başkalarının haklarını ihlal etmediğimi ve tezimin tek yetkili sahibi olduğumu beyan ve taahhüt ederim. Tezimde yer alan telif hakkı bulunan ve sahiplerinden yazılı izin alınarak kullanılması zorunlu metinlerin yazılı izin alınarak kullandığımı ve istenildiğinde suretlerini Üniversiteye teslim etmeyi taahhüt ederim.

Yükseköğretim Kurulu tarafından yayınlanan "**Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına ilişkin Yönerge**" kapsamında tezim aşağıda belirtilen koşullar haricince YÖK Ulusal Tez Merkezi I H.Ü. Kütüphaneleri Açık Erişim Sisteminde erişime açılır.

- Enstitü /Fakülte yönetim kurulu karan ile tezimin erişime açılması mezuniyet tarihinden itibaren 2 yıl ertelenmiştir. [1]
- Enstitü / Fakülte yönetim kurulunun gerekçeli kararı ile tezimin erişime açılması mezuniyet tarihimden itibaren ... ay ertelenmiştir. [2]
- Tezimle ilgili gizlilik karan verilmiştir. [3]

26 /07 /2018

Kadriye AKSOY

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[i] *"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"*

(1) Madde 6. 1. Lisansüstü tezle ilgili patent başvurusu yapılması veya patent alma *sürecinin devam etmesi durumunda, tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü Üzerine enstitü veya fakülte yönetim kurulu iki yıl süre ile tezinerişime açılmasının ertelenmesine karar verebilir.*

(2) Madde 6.2. Yeni teknik, materyal vemetotların kullanıldığı, henüz makaleye dönüşmemiş veya patent gibi yöntemlerle korunmamış ve internetten paylaşılması durumunda 3.şahıslara veya kurumlara haksız kazanç; imkanı oluşturabilecek bilgi ve bulguları içeren tezler hakkında tez danışmanın önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulunun gerekçeli karan ile altı ayı aşmamak üzere tezin erişime açılması engellenebilir.

(3) Madde 7. 1. Ulusal çıkarları veya güvenliği ilgilendiren, emniyet, istihbarat, savunma ve güvenlik, sağlık vb. konulara ilişkin lisansüstü tezlerle ilgili gizlilik kararı, tezin yapıldığı kurum tarafından verilir. Kurum ve kuruluşlarla yapılan işbirliği protokolü çerçevesinde hazırlanan lisansüstü tezlere ilişkin gizlilik kararı ise, ilgili kurum ve kuruluşun önerisi ile enstitü veya fakültenin uygun görüşü Üzerine üniversite yönetim kurulu tarafından verilir. Gizlilik kararı verilen tezler Yükseköğretim Kuruluna bildirilir.*
Madde 7.2. Gizlilik karan verilen tezler gizlilik süresince enstitü veya fakülte tarafından gizlilik kuralları çerçevesinde muhafaza edilir, gizlilik kararının kaldırılması halinde Tez Otomasyon Sistemine yüklenir

** Tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu tarafından karar verilir.*