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**COOPERATIVE LEARNING AND ORAL INTERACTION ACTIVITIES
IN AN INTENSIVE GRADE 6 ESL PROGRAM IN QUEBEC**

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Abstract

To date, little research has explored interaction in second language elementary classrooms by students carrying out group activities, more precisely cooperative learning tasks. This study examined the interaction among two heterogeneous groups of four Grade 6 English second language students enrolled in an intensive program in a French language school in the province of Quebec. The main purpose was to see if, while engaged in cooperative learning tasks, students took turns in the conversation, students used the target language, and whether the turns were equally distributed amongst students. The study also analysed the interaction to determine if students provided each other with scaffolding, and if so, which type. For the purpose of this project, nine cooperative learning tasks were developed, the interaction amongst students was videotaped, and the transcriptions were analysed. The results showed that, for each activity, all students took turns in the conversation in a fairly equal manner, that 91.4% of turns were in English, and that the scaffolding provided involved nine different strategies, of which the most important were request for assistance and other-correction.

Résumé

Jusqu'à ce jour, un nombre limité de recherche a été mené dans le domaine de l'interaction chez des élèves de niveau primaire en langue seconde lors d'activités en sous-groupes, plus précisément relié à des tâches d'apprentissage coopératif. L'objectif de la présente étude était donc d'analyser l'interaction au sein de deux groupes hétérogènes de quatre élèves de 6^{ème} année, inscrit dans un programme d'immersion anglaise, dans une école francophone de la province de Québec. Le but premier de cette étude était de voir si tous les élèves prenaient la parole lors des activités d'apprentissage coopératif, si tous les élèves prenaient la parole en langue cible et si les prises de paroles étaient équitablement réparties entre les élèves. L'étude avait également pour objectif d'analyser les interactions afin de déterminer si les élèves fournissaient de l'étayage et, le cas échéant, les modes d'étayage mis en place par les pairs. Afin de réaliser cette étude, neuf activités d'apprentissage coopératif ont été élaborées, les interventions entre apprenants ont été enregistrées sur vidéo-caméra et les transcriptions ont été analysées. Les résultats ont démontrés que, pour chacune des activités, tous les élèves ont pris la parole de façon assez équitable, que 91.4% des tours de paroles ont été effectués en langue cible et que les élèves ont fourni neuf sources d'étayage différentes, les plus fréquemment utilisées étant la demande d'assistance (request for assistance) et la correction par les pairs (other-correction).

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Chapter 1: Introduction

1 Problem Statement

Although French and English are official languages in Canada, the population living in the province of Quebec is predominantly French-speaking. Therefore, few opportunities are given to the members of the community to speak English. Around 1977, French language school boards started designing and implementing an intensive English program in order to fulfill the parents' needs and desire to provide their children with more opportunities to learn their second language in Quebec. The intensive English program was first offered in schools where English was more present such as les Mille-Îles and Greenfield Park. The first program implemented was based on a five-month period where English was taught intensively and exclusively and the other disciplines were taught in French during the other five months of the year. Thirty years later, this program is still offered to thousands of students in different parts of the province.

The results of several studies have shown that the intensive English program has positive effects on learning a second language (Collins et al., 1999; Lightbown & Spada, 1994, 1997; Spada & Lightbown, 1989; White & Turner, 2005) and does not have a negative impact on the learning of the other school disciplines. However, the need to enhance English communication skills is still a concern and in order to help students reach a higher level of proficiency in their second language (L2) and to allow more opportunities for speaking in regular and intensive language classrooms, the Ministère de l'Éducation, du Loisir et du Sport (MELS) has recently included group work and cooperative learning activities in its curriculum.

The Quebec Education Program for elementary students of English as a Second Language (ESL) is now defined by a competency-based approach which was developed based on recent studies in the field of cognitive psychology and socio-constructivism, which promotes group work and the use of cooperative learning activities. A constructivist perspective encourages more concrete and meaningful learning experiences for students. In fact, the classroom is seen as a mini-society where learners engage in social interaction and reflection. This leads to a higher level of autonomy where the teacher's role is modified in order to be a facilitator rather than a provider of knowledge.

Although considerable empirical research has been conducted on oral interaction involving L2 pair and group work in laboratory settings, little research has specifically focused on group work in the context of cooperative learning activities in language classrooms. Therefore, more research in this specific area is needed. The main purpose of the present research is to contribute to this area through the exploration of cooperative learning activities carried out by children in an intensive ESL program in a Quebec French language elementary school. Despite the fact that the research literature relevant to this study will be dealt with in Chapter 3, the following section provides a brief overview of how the cooperative learning approach is viewed. Although to date cooperative learning has been largely associated with first language, mainstream educational instruction, L2 educators and researchers have become increasingly aware of its potential for L2 learning (Dörnyei, 1997; Oxford, 1997).

1.1 The Cooperative Learning Approach

Johnson, Johnson and Holubec (1990) point out that cooperative learning should be used “(...) when we want students to learn more, like school better, like each other better, like themselves better, and learn more effective social skills”. This might sound very utopian, but based on the results of numerous studies carried out in mainstream classrooms, including Stevens and Slavin’s (1995) research, cooperative learning has been shown to enhance all the elements mentioned above. In fact, the cooperative learning approach is a highly structured approach based on a sociocultural perspective, which defines learning as being a process in which students jointly construct their knowledge. The cooperative learning approach has been developed in order to encourage students to learn from others while performing activities that promote interaction and negotiation of meaning and form. The main purpose of a cooperative learning activity is to have students work in small groups in order to achieve a common goal. The idea behind this learning method is that each student contributes to the completion of a specific task and each team can benefit from the contribution of the other teams in the classroom. In other words, the interaction between the members of the team allows each student to reach a higher level of comprehension and learning than might not be possible if the person worked alone.

1.1.1 Cooperative Learning Principles

Olsen and Kagan (1992, cited in Oxford, 1997) define cooperative learning as being a “group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others.” (p. 443). As suggested by Johnson and Johnson (1994), an effective cooperative learning setting should include five different learning principles: Positive interdependence, individual accountability, face-to-face interaction, social and small group skills and group processing.

To begin with, Johnson and Johnson (1998) define positive interdependence as something that “occurs when one perceives that one is linked with others in a way so that one cannot succeed unless they do (and vice versa) and / or one must coordinate one’s efforts with the efforts of others to complete a task”. In other words, each member’s effort will contribute to the success of the task and to the achievement of the common goal. In order to do so, the activity must be developed so as to give a different task or piece of information to each student. Positive interdependence can also refer to the fact that each student is assigned a specific role within the group such as note-taker, material manager, time keeper, or captain silence. Assigning students defined roles helps learners to be more responsible and provides a more structured classroom environment.

According to Johnson and Johnson (1999), individual accountability refers to the evaluation of the contribution of each team member based on their individual and joint participation in helping the group achieve a common goal. This means that, since the success of the task is seen as a joint effort of all members individually held accountable for their own assigned material, not only group performance is evaluated but also the individual participation of each member of the team.

Face-to-face interaction also plays an important role in cooperative learning activities. The students, in addition to exchanging pieces of information, bring each other mutual support and help called scaffolding and provide positive and constructive feedback to their peers. This cooperation has a positive influence on their social and cognitive development, increases their level of self-esteem and self-confidence, improves inter-ethnic relations and helps students understand that problematic situations can be

seen from different perspectives. Through face-to-face interaction, students learn how to solve conflicts, give their opinion and make collaborative decisions.

Equally important, cooperative learning also helps students develop social and small group skills since they have to interact with others and work as a team towards the same goal. Therefore, working in cooperation helps them manage or reduce their conflicts by respecting each other and listening to each other. However, according to Johnson and Johnson (2004), teachers should not expect students to know how to positively interact with others and, therefore, should teach social skills in order to help students to encourage and support others, and to express themselves in an appropriate way.

Last, when the activity is finished, the group is asked to reflect on their individual and team contribution. This step is called group processing and is essential to help students to evaluate the way they are functioning as a group and also to find more effective ways to individually contribute to group performances. It also gives the teacher a general idea of how students progress in their learning and, therefore, how to offer appropriate help to students or groups who might encounter difficulties.

1.1.2 Cooperative Learning Structures

Cooperative learning is a structural approach based on “the creation, analysis, and systematic application of structures or content-free ways of organizing social interaction in the classroom. Structures usually involve a series of steps, with proscribed behaviour at each step” (Kagan cited in Holt, 1993, p. 9).

The cooperative learning approach proposes more than fifteen different types of selected structures such as the Three-Step Interview, Think-Pair-Share or Co-op Co-op. Each structure has a different academic or social function. Three types of structures, based on the goals they are intended to accomplish, were used to design the activities which will be carried out in the context of this study. The three structures selected – Numbered Heads Together, Jigsaw, and Roundrobin / Roundtable – are described below.

The Numbered Heads Together structure encourages students, as a group, to brainstorm on a topic, to ask questions and to carefully listen to each other. The main objective of this type of activity is to ensure that everyone in the team is able to answer a

question asked by the teacher. Once students have conferred with each other, the teacher randomly calls on a student to answer the question, thus building in individual accountability.

The jigsaw structure is designed so as to provide a different piece of information to each student of the team. Therefore, in order to solve a problem, the students have to consult each other and share information. This means that the cooperation of each learner is essential in order for the task to be successful.

Finally, the Roundrobin / Roundtable structure allows each student, in turn, to share ideas and express their opinions orally (Roundrobin) or through the use of writing (Roundtable).

1.2 Pertinence of the Study

Within L2 research, numerous studies have investigated oral interaction from an interactionist perspective. However, it is of note first of all that the majority of these studies which have examined oral interaction were done in dyads; very few studies have involved group work. Furthermore, most of the studies investigating pair and group work were performed in experimental laboratory settings (Foster, 1998; Gass, Mackey & Ross-Feldman, 2005; Naughton, 2006; Pica, 1994; Smith, 2003) rather than in a classroom context. Another important element is that most of the investigations have been carried out on adults (Buckwalter, 2001; Foster and Skehan, 1999; Skehan and Foster, 1999; Storch, 2007) and occasionally on secondary school students (Swain & Lapkin, 1998). With respect to research which has specifically dealt with cooperative learning activities in L2, studies are extremely limited and have mainly involved adults (Naughton, 2006).

In fact, to our knowledge, no previous study other than that of Mattar and Blondin (2006) has investigated the interaction between elementary students while involved in carrying out cooperative learning activities in a second or foreign language classroom. Since Mattar and Blondin's research is of particular relevance to this study, the same three research questions which they used to investigate interaction in cooperative learning groups will be used in the present study. However, an additional item to be investigated pertains to the way students scaffold each other in order to reach a higher level of understanding.

The term scaffolding is used to refer to the “process by which tutors-parents, caretakers, teachers, or more expert partners – help someone less skilled solve a problem” (De Guerrero & Villamil, 2000, p. 52). Mattar and Blondin’s research study will be discussed in further detail in the literature review.

1.3 Research Questions

The main purpose of this study is to contribute to classroom-based research on oral interaction by exploring from a sociocultural perspective how elementary students in an intensive ESL program collaborate to carry out specific types of cooperative learning tasks. The research questions to be addressed in this study are the following:

- Q1) While performing cooperative learning activities, does each student of the team take turns in the conversation?
- Q2) While performing cooperative learning activities, does each student of the team take turns in the target language?
- Q3) While performing cooperative learning activities, are the turns equally distributed between the students?
- Q4) While performing cooperative learning activities, do the students provide each other scaffolding, and if so, what types are provided?

1.4 Summary

This chapter has provided an overview of the cooperative learning approach and addressed the questions which will be investigated in the present study. In the next chapter, I discuss how sociocultural theory will be used as the theoretical framework for this study.

Chapter 2: Theoretical Framework

2 Introduction

The purpose of the present chapter is twofold: first, to briefly outline the foundation of the sociocultural theory perspective initiated by Vygotsky, and secondly, to present an overview of how scaffolding has been used to analyse L2 interaction in previous studies. Taking Vygotsky's theoretical framework as a guide, this chapter discusses social interaction and peer assistance from a sociocultural perspective.

2.1 Vygotskian Sociocultural Theory

According to Lantolf and Thorne (2006), Vygotskian sociocultural theory "offers a framework through which cognition can be systematically investigated without isolating it from social context" (p. 1). This assumption is based on Vygotsky's understanding of learning which suggests that cognitive processes are first externally mediated through social interaction and are eventually internalized by the learner. From this perspective, learning is seen as a dynamic social process which occurs when an individual interacts with others within a zone, called the *zone of proximal development* (ZPD), as defined in greater detail in the following section.

For Vygotsky, when learners are given the opportunity to engage in social interaction, they interiorize new conceptual knowledge and, through mediation, in particular via language, gain conscious control over their cognitive processes. This perspective, which generally applies to learning at large, can also be used to understand language learning. From a sociocultural point of view, learning a language is not only learning to use a communication tool and its structure but also the cultural rules related to a specific language in order to use it appropriately in a given social setting. More specifically, it suggests that language learning is highly influenced by the nature and degree of social interaction with others in specific social environments. However, this also implies that learners create their personal view of the world and that individual development varies based, first, on the level and type of interaction with others and, second, on the availability of tools provided in a given environment.

In sum, from a sociocultural perspective, language learning is made possible when there is scaffolding, meaning that the knowledge is co-constructed with the assistance of

an expert or more capable peer, and when learners work in their ZPD. These two key theoretical concepts provide the basis of this study and are elaborated on below.

2.1.1 The Zone of Proximal Development

One aspect of sociocultural theory is that more expert others such as caretakers, adults, teachers or more capable peers, can help novices, referring to children or less skilled peers, construct their own knowledge by helping them to work in their ZPD. For Vygotsky (1978), working in the ZPD stimulates learning and helps children to reach a higher cognitive plane such as abstract reasoning, intentional attention, planning and decision-making. The ZPD, as defined by Vygotsky (1978), refers to “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). In other words, it corresponds to the zone immediately above the actual level of knowledge of the child.

Since the ZPD defined by Vygotsky refers to learning at large, a definition more specifically aimed at second language learning was proposed by Ohta (in Foster & Ohta, 2005), who defined it as: “the distance between the actual developmental level as determined by individual linguistic production, and the level of potential development as determined through language produced collaboratively with a teacher or peer” (p. 414). To put it differently, with the assistance and support of a more knowledgeable adult or child, the child learns and develops linguistic abilities and skills which are close to his/her actual level of development.

As teachers, working in the children’s ZPD is crucial in order to optimize the chances for language development to occur. Of course, there are fundamental steps in the human development that must be respected. For example, a child cannot sing before he learns to talk. This implies that if the task is too challenging or conversely not enough, i.e. outside the individual’s ZPD, little or no learning will take place. Based on this perspective, the “higher cognitive process that emerges as a result of interaction” is more important than the completion of a specific task in and of itself (Lantolf & Appel, 1994, p.10).

2.1.2 Scaffolding

In order to help students work in their ZPD, various types of assistance are provided. The type of assistance offered by an adult or a more capable peer is called scaffolding, a term coined by a psychologist, Jerome Bruner and defined as: “a kind of (...) process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts” (Wood, Bruner, & Ross, 1976, p.90).

According to Wood et al. (1976), the process of scaffolding is characterized by six main functions used by the expert to help the novice accomplish a task. Each one of these characteristics is briefly explained below. The first function is called recruitment and corresponds to the way the expert engages the learner’s interest in the task. The second function is called reduction in degrees of freedom and corresponds to when the expert helps simplify the task either by explaining it in simple words or using synonyms. The third function, direction maintenance, is used by the expert in order to keep the learner motivated and focused on the task until the goal is finally reached. A fourth function involves the marking of critical features, which means that the expert will highlight certain discrepancies, either verbally or using gesture or mime, in order to draw attention to specific errors. It also means that the expert will assist the novice in finding the appropriate solution or answer. The fifth function of assistance involves the control of frustration and implies that the expert will provide encouragement and prompts to the novice so as to help the learner save face. The expert will thus play an important role in reducing stress and anxiety while the activity is being performed. The final function is called demonstration and refers to the expert who plays the role of a model which will be imitated by the novice.

This concept of scaffolding, which can be extended to the learning of any cultural type of activity within a given society, is pertinent to this study since one of the fundamental elements of cooperative learning is the use of heterogeneous small group work. When students with different skills and different levels of language proficiency are asked to work together on a variety of tasks, learners have the opportunity to develop different competencies and are likely to provide each other mutual assistance as they carry out a task. These different types of assistance will gradually be reduced until the

child is able to perform the task on his own, which means that the child will go from other-regulated to self-regulated behaviour. In the following section, I discuss how the notion of scaffolding has been used to analyse interaction in second language classroom contexts involving pair or group work.

2.2 Analysis of Scaffolding in L2 Interaction

Framed in the work of Vygostky's sociocultural theory, researchers investigating interaction in pair/group work developed tools to help them analyse and classify the types of assistance provided by the learners. In this section, relevant studies investigating scaffolding in L2 interaction will be surveyed and presented in relation to research conducted by the following researchers: Donato (1994); Foster & Ohta (2005); Swain & Lapkin (1995, 1998, 2002); Villamil & De Guerrero (1996).

2.2.1 Donato's (1994) Study of Collective Scaffolding

Donato's (1994) study consisted of audio taping group interaction among three university students of French as they were performing oral activities in their language classroom. The students had worked together before and enjoyed collaborating on projects. Donato's main objectives were, first, to explore the way students co-constructed their linguistic knowledge while performing tasks they were familiar with and, second, to analyse how second language learners working together scaffolded each other and how they mutually influenced the development of their interlanguage system.

The tool used by Donato (1994) to analyse the assisted performance provided by the students was operationalized based on Wood et al.' (1976) definition of scaffolding as described above. Considering Wood et al's (1976) features characterising scaffolding and with the purpose of illustrating assisted performance, Donato (1994) created a diagram with two axes. One axe represented the scaffolded parts of each utterance and the other indicated the interactional time. The diagram was used to visually represent, stepbystep, the co-construction of the utterances produced by the students. The analysis of the instances of scaffolding revealed through the transcriptions of the interaction provided evidence for "collective scaffolding", meaning that each learner played, at the same time, the role of expert and novice. In fact, the transcript of the interaction clearly

illustrated that a chunk of utterance provided by the weakest student of a group, at times, contributed to solve a linguistic problem. This suggests that not only students who are identified as low achievers could benefit from assisted performances.

Although interesting, it is important to mention that Donato's (1994) analysis of collective scaffolding was rather exploratory since it was limited to the observation of a group of three students discussing and planning, during a one-hour session, one oral interaction activity for a presentation which would take place during the next class.

2.2.2 Villamil and De Guerrero's (1996) Taxonomy

In order to discuss the interaction that occurs during the L2 peer revision process, Villamil and De Guerrero (1996) developed a rather complex method of analysis defined by three main categories: social-cognitive activities, mediating strategies and significant aspects of social behaviour. Each category was then divided into several subsections. The subsection called "providing scaffolding" which is included in the second category named "mediating strategies" is the most relevant to the present thesis proposal since it refers to the analysis of scaffolding in L2 interaction. Therefore, only this category will be discussed in this chapter.

In order to examine the types of help and support provided by university students working in pairs during peer revision of written texts, Villamil and De Guerrero (1996) created fourteen substrategies in order to identify and code the data. The substrategies are listed as follows: requesting advice; advising or responding to advice; eliciting/responding to elicitation; reacting; requesting clarification/clarifying; restating; announcing; justifying; instructing giving directives and finally, making phatic comments.

Although students with different levels of proficiency were paired up so as to form dyads of differing levels of language proficiency, the results showed that not only students with a higher level of proficiency offered scaffolding. In fact, the results revealed that both stronger and weaker students provided support and assistance and both benefited from peer revision. In sum, the results are in line with what had been observed by Donato (1994) regarding "collective" or "mutual" scaffolding, meaning that students, despite a lower linguistic level, can assist others in collaborative problem solving.

2.2.3 Swain and Lapkin's (1998) Analysis of Language-Related Episodes

In an attempt to examine the dialogues generated by pairs of students in a French immersion classroom while engaged in a jigsaw task, Swain and Lapkin (1995) chose to investigate segments of the interaction they referred to as language-related episodes (LREs). LREs were first defined by Swain and Lapkin in 1995 as "any segment of the protocol in which a learner either spoke about a language problem he/she encountered while writing and solved it either correctly or incorrectly, or simply solved it without having explicitly identified it as a problem" (1995, p.378). Originally, LREs were used to analyse the mental processes and reflection engaged in by the learner while producing a written task. In order to do so, the learner was asked to verbalize his/her thoughts as he/she was individually performing the task. This process was identified by Swain and Lapkin as a "think-aloud protocol".

For the purpose of Swain and Lapkin's research in 1998, LREs were redefined as: "any part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others" (p. 326). The researchers analysed the conversations of 18 Grade 8 students as they were asked to collaboratively reconstruct a story based on a series of pictures and write it out. The dialogues of each pair of students were tape-recorded and analysed to identify language-related episodes.

LREs were coded based on seven descriptive categories, each one referring to a strategy used by the learner to solve linguistic problems. The following categories were identified: sounds right/doesn't sound right from both a lexical and grammatical point of view; makes more sense/doesn't make sense; application of a grammatical rule; lexical search via English, French or both; translation; stylistic and finally spelling. In order to identify more precisely the types of interaction, LREs were also categorized as either lexis-based LREs which served to identify any discussions related to vocabulary words or as form-based LREs which referred to the negotiation of the linguistic form.

The analysis of the transcripts allowed the researchers to identify a total of 190 occasions which showed evidence of scaffolding while the students were trying to solve linguistic problems and which helped them consolidate or acquire new knowledge. The results also revealed that the students were aware of their linguistic problems and worked in collaboration in order to fill their linguistic gaps. Furthermore, the data analysis

demonstrated that the level of production of LREs and the time on task varied from one team to another which suggests that students will engage differently in the task and, therefore, will benefit differently from peer work.

In a somewhat similar study conducted in 2002, Swain and Lapkin incorporated a third category into the previous protocol in order to make a more precise analysis of peer assistance. The category named “discourse” served to classify LREs referring to the interaction in relation to the text structure and included instances of scaffolding referring to sequencing, stylistic elements and the use of markers. For the purpose of this precise study, the researchers also wanted to investigate if the feedback the student received from their team mate was incorporated in their final written production or not. To do so, they classified the reformulation either as being accepted or rejected by the student. The outcomes of the study showed that about two-thirds of the feedback was taken into consideration and included in the students’ final drafts. This observation suggests that peer interaction helps students to reflect and reach a deeper understanding of the target language.

2.2.4 Foster and Ohta’s (2005) Tools to Identify Negotiating for Meaning and Assistance

From a theoretical view point, cognitive and sociocultural approaches to understanding language learning differ considerably (Dunn & Lantolf, 1998). Whereas cognitive approaches are essentially concerned with individual mental processing, sociocultural approaches focus on how language develops in specific social contexts. Nevertheless, within cognitively based approaches to language learning, interaction has received a considerable amount of attention, notably in studies concerned with what has been termed negotiation for meaning (NfM; e.g., Long, 1985, 1996; Pica, 1994). It might be further noted that the many studies conducted within this paradigm have primarily involved laboratory settings rather than classrooms. In a study conducted by Foster and Ohta (2005), they attempted to show the limitations of an approach to interaction based solely on an analysis of the types of negotiation for meaning strategies as formulated by Long.

The study was conducted with two intact language classrooms. The participants in the first group were 20 college students learning English at the intermediate level in London and were from different L1 backgrounds. The learners from the second group were enrolled in a Japanese course in an American university. The information exchange tasks consisted of students interviewing one or two of their classroom partners regarding their experience and impressions of studying abroad. The interactions were audio-taped and the first five minutes of each conversation were transcribed and analysed in order to identify instances where learners were negotiating meaning after evidence of communication failure. In order to do so, the researchers used a tool developed by Long (1980, cited in Foster and Ohta, 2005) which is based on three categories: comprehension checks which are often formed by tag questions and aim to verify if the learner has understood the utterance, confirmation checks which are generally answerable by a simple word, and clarification checks which indicate that additional information is required.

Analysis of the data generated in this study also enabled Foster and Ohta to identify four different types of scaffolding which did not involve communication breakdowns: co-construction, other-correction, self-correction, and continuers. The co-construction process refers to a joint collaboration in the construction of utterances. In other words, the linguistic knowledge of both learners is put together in order to fill the gaps and complete an utterance which, if produced individually, would have been incomplete. The notion of other-correction is used to identify the process by which one individual repairs the utterance of his or her partner. When the learner repairs his/her own utterances, this process is called self-correction. The category named continuers refers to instances expressing interest which encourages the learners to elaborate on the topic.

With respect to Foster and Ohta's study, two points are of particular note. First, unlike studies on NfM conducted in laboratory settings, this study, conducted in real classroom settings, indicated that instances of NfM between dyads and triads in language classrooms were rather infrequent. They explained this relative lack of negotiated interaction by the fact that no negotiation was needed since the message was clear or, as mentioned by other researchers (Foster, 1998; Pica, 2002), negotiation was avoided due

to a face-threatening situation in keeping with the general rule that in ordinary social interaction interlocutors do not normally correct each other on linguistic grounds (Schegloff, Jefferson, & Sacks, 1977).

Secondly, the results, based on Foster and Ohta's observations, showed ample evidence to support the fact that the type of help afforded to learners is not limited to NfM strategies which presuppose the need to intervene in response to communication breakdowns. In other words, although the NfM strategies are certainly part of the way the language learner may be assisted during interaction, the way assistance may be provided is broader, as suggested by the additional instances of scaffolding noted above. As the researchers observe: "...far from being central to SLA, we would claim it (NfM) represents just one of the many ways language development is advanced through interaction. Social interactive processes are important, whether understood from a cognitive perspective as triggering acquisition in the brain, or from a sociocultural perspective as the embodiment of the language development in process. Interactional processes including negotiation for meaning and various kinds of peer assistance and repair are among the many ways learners gain access to the language being learned." (p. 426).

2.2.5 Summary

The main purpose of this chapter was to briefly discuss the foundation of sociocultural theory including the notions of ZPD and scaffolding and to portray the different ways scaffolding has been used as a tool to analyse L2 interaction by previous scholars. The next section presents a review of the literature pertaining to studies related to interaction in pair and group work in the area of second language research.

Chapter 3: The Review of the Literature

3 Introduction

The review of the literature is divided into three main sections. The first section (3.1) presents research studies investigating the role of interaction in pair/group work from an interactionist perspective. The next section (3.2) provides an overview of group work interaction from a sociocultural perspective. The third and final section (3.3) focuses on research involving cooperative learning. In this last section, research studies will be used to support the fact that cooperative learning may be a possible solution for fostering more successful group work.

3.1 The Role of Interaction in Pair/Group Work: Interactionist Perspective

Since a teacher-centered approach in large language classrooms does not provide enough time to practice the target language, a number of researchers have recommended the use of pair work and group work in second or foreign language classrooms (Long & Porter, 1985; Pica, 2002; Pica et al., 1996). In sum, researchers point out that, to increase the amount of speaking time in the classroom, pair and group work provide a valid option and also serve to increase students' level of motivation (Long, 1990) as well as help individualize instruction (Ballman, 1988). Investigations also reveal that, through group work or pair work, students engage in more negotiation of meaning (Long, 1983, Lightbown, 2000). In the present chapter, reference to group work will also include dyads.

3.1.1 Group Work versus Individual Work

The positive effects of group work over individual work have long been investigated. Researchers, such as Long and Porter (1985; Long, 1990), support the use of group work in SL classrooms for a variety of reasons. They claim, for example, that group work provides more opportunities to practice the target language, that students feel less intimidated when they interact in small groups rather than in whole-class situations, and that, therefore, group work increases the amount of negotiation which helps improve the quality of the language.

A study conducted by Doughty and Pica (1986) comparing the amount of interaction during pair work, group work and teacher-centered settings showed that students produced more input and engaged in more negotiation when they worked in pairs or groups compared to when they worked in regular teacher-fronted classroom settings. In fact, their study revealed that the total amount of speech was almost 10 times higher in group settings compared to teacher-fronted situations.

According to Long and Porter (1985), there are at least five main pedagogical arguments to support the use of group work in second language learning. One of the main claims is that communication in small groups increases the language practice time by providing more speaking opportunities in the target language. Another positive aspect of small group work is that it creates a more natural setting for conversation. Therefore, it allows students to develop coherent discourses rather than isolated utterances, which has a positive impact on the quality of talk. Long and Porter's (1985) study also revealed that group work helps individualize instruction since it allows students with different skills, cognitive styles, and cultural backgrounds to work together. Another reason that supports group work over individual work is that small group interaction promotes a positive affective environment by creating an intimate setting. This encourages students to take more risks in order to negotiate meaning and form on a more regular basis whereas, in whole-class situations, "students may feign comprehension in order to save face" (Doughty & Pica, 1986; Long & Porter, 1985; Pica 2002,).

In fact, it has been suggested that a high level of anxiety, and low level of motivation and self-confidence reduces the chances for learners to acquire comprehensible input, and therefore, negatively affect the level of acquisition (Krashen, 1985). This assertion is also supported by Lightbown and Spada (2006) who explain that learners' stress and anxiety generate a "metaphorical barrier that prevents learners from acquiring language even when appropriate input is available" (p. 37). As a result, a "mental block" is created which prevents comprehensible input from being used and acquisition from taking place. Compared to situations where learners have to speak in front of the entire classroom, interacting in small groups creates a risk-free environment which reduces the level of stress and encourages collaboration. Finally, group work motivates learners by providing a greater variety of language practice.

Considering that a great variety of past experiments on group work involved adults, Oliver's (1998) investigation is very pertinent for the present research. Her study consisted of comparing the negotiation strategies used by children aged from 8 to 13 years old working in pairs to adult dyads. The researcher concluded that children, like adults, are capable of negotiating meaning in order to make input comprehensible when working on communicative tasks. The only difference between adult and child interaction identified by the researcher corresponded to the type and frequency of use of specific strategies. The author noticed, for example, that children used other-repetition more often than adults but tended not to use comprehension checks. However, she observed that both groups used clarification requests, confirmation checks and self-repetition on a regular basis. According to Oliver (1998), elementary school students interact in a similar way as adults do, and, therefore, should benefit from working in pairs.

3.1.2 Task-Based Research

Within the interactionist perspective, the underlying assumption is that breakdowns in communication can lead to the need to negotiate for meaning; the greater the need for negotiation of meaning, the more likely it will be that the learner will become aware of the correct way to express himself. Since it has been further argued that tasks may generate different levels of negotiation, task type is viewed as a key factor in terms of understanding the effectiveness of work in groups and any acquisition of language which may ultimately be forthcoming (Doughty & Pica, 1986; Long, 1990). Within this framework, two notions of particular importance pertain to the distinction between (1) a one-way and a two way task and (2) open and closed tasks.

Long (1990) distinguishes a one-way task from a two-way task based on the way the information is distributed between the participants and the way the task is structured in order for the learners to exchange information and perform the task. He refers to a one-way task as a type of activity where only one member of the team has the information. This would be the case in an activity, for instance, where one student has to describe a picture and the other members of the team have to draw it. By contrast, a

typical two-way task would be, for example, a jigsaw activity in which each participant has an exclusive piece of information and where the participation of all the team members is needed in order to complete the task successfully.

A study conducted by Doughty and Pica (1986) revealed that for one-way information gap tasks, which refers to tasks in which students are neither required to exchange information nor obliged to contribute to discussions, students with higher linguistic skills have a tendency to dominate the conversation within the group. Therefore, the authors suggest the use of two-way or multi-way exchange tasks, such as information gap activities, in order to increase the level of efficiency and to insure a higher amount of interaction in group work. Long and Porter (1985) also agree with the fact that one-way tasks bring less negotiation since only one student holds the information and the other team members have “nothing to bargain with” (p. 224).

Long (1990) refers to an open task to describe an activity where there is a wide range of possible answers. This would be the case, for example, in a debate or free conversations on different topics such as the student’s last summer holidays. In contrast to an open task, a closed task, which is considered by Long as more effective than an open task, refers to an activity where only one or a limited number of solutions are acceptable.

3.2 Group Work from a Sociocultural Perspective

Although as discussed in the previous chapter, cognitive-based approaches to language learning are essentially concerned with individual mental processing, sociocultural approaches focus on how language develops in specific social contexts (Dunn & Lantolf, 1998). As Lightbown and Spada, (2006) note: “sociocultural theorists assume that the cognitive processes begin as an external socially mediated activity and eventually become internalized” (p. 48). In other words, learning occurs through social interaction and mediation, and people co-construct their knowledge while communicating with others.

Swain and Lapkin (2002), who have carried out several studies on how learners co-construct their linguistic knowledge, observed and analyzed the dialogue of two Grade

7 French immersion students while they were writing a collaborative story. After both students had finished writing their story, modifications were made by a native speaker and copies of both their original story and the reformulated story were given back to each one of the students, first, in order for them to notice and reflect on the changes made, and second, in order for them to rewrite, independently, the story and make any changes they wanted. The original story written in collaboration was used as a pre-test and was compared to the two copies independently written and used as a post-test. The authors observed that the feedback given by the native speaker resulted in numerous opportunities for partners to negotiate meaning and form and thus bring them to a greater understanding of the language; the parts thus negotiated were a significant factor in terms of the differences identified between pre-test and post-test versions of the task. An earlier study done by Swain (2000) also revealed that when students worked jointly to write a collaborative dialogue, they produced more accurate texts which exceeded their individual performances.

Similar results are found for a study conducted by Storch (2007) involving four intact ESL university classrooms which compared the performances of pairs and individuals while performing a text editing task. Although the results did not show significant differences in the accuracy of the texts, the analysis of pair talk confirmed that pair work is beneficial for learning since it provides opportunities to co-construct linguistic knowledge and, therefore, through repetition or imitation, helps students internalize new forms. Other studies done by Storch (1999, 2005) confirmed that students working collaboratively produced more accurate texts, although shorter. Storch (2005) mentions that the fact that students produce longer texts when they work individually is mostly due to the fact that they have a tendency to include too many details in their written work.

Another positive aspect of group work is that students seem more motivated to focus on form when working with others. Storch (1999, 2005), for example, claimed that, although students take almost twice the time to complete the task compared to when they work on their own, it should not be seen negatively. In fact, she argues that one possible explanation is that in pair work, students revise their text before submitting it, whereas, in individual work, they quickly complete the task and do not revise it.

An argument sometimes mentioned by teachers against group work is that children may learn the mistakes of others. A study done by De Guerrero and Villamil (2000) investigating peer collaboration in a university ESL writing classroom revealed that as the students were discussing the text, they sometimes exchanged incorrect information or made bad decisions. However, they also noticed that a large variety of scaffolding was provided mutually between the two partners when they were revising a text written by one of the two students of the team. An element that should, however, be highlighted is that in this study both partners were highly involved in the task and used appropriate social skills; which is, unfortunately, not always the case in group work.

Another argument often used in the classroom is that students do not always refer to the L2 to communicate with their team mates in group work. De Guerrero and Villamil (2000) explain that the use of the L1 can sometimes be seen as a type of scaffolding, as it is the case in their study, where the purpose of the task was to revise a text written in the L2. They explain that in this precise case, the L1 was only used as an instrument to help them make connections with their second language and did not interfere with the task. However, they agree that the L1 should not be used with all types of tasks since it “discourages the employment of a critical psychological tool that is essential for collaboration.” (p. 170).

3.2.1 Understanding varied outcomes in group work

It is first important to mention that research studies conducted within the interactionist perspective have mostly been done in laboratory settings and have mainly examined the communication strategies used by the learners such as confirmation checks, clarification requests and comprehension checks. Of particular interest in this regard is Foster’s (1998) study in which she investigated how ESL students used these strategies in a real classroom context. What she discovered is that, unlike what the studies produced in laboratory settings might lead one to conclude, students in the real classroom setting rarely had recourse to such strategies. To explain this outcome, she suggested that such strategies were face-threatening; as in real life situations outside of the classroom, learners avoided correcting their peers on the linguistic level. A study conducted by Foster and Ohta (2005), as reported in Chapter 2, also showed that the use of negotiation

for meaning strategies as defined in interactionist research was very limited in the context of the two classrooms observed. Although such strategies are a form of scaffolding, other forms of scaffolding as demonstrated in this study (i.e., co-construction, other-correction, self-correction and continuers) were also in evidence.

As previously noted within the interactionist SLA perspective, the design of the task is considered to be a major factor in terms of the ultimate effectiveness of group work. By contrast in sociocultural approaches, a point which is often stressed pertains to the way the individuals involved in the activity orient to the task. In a study carried out by Lantolf (2000), the researcher explains that “students with different motives often have a different goal as the object of their actions, [and this,] despite the intentions of the teacher” (p. 20). Of course, the level of engagement in a task has a lot to do with the level of motivation of the learner. As mentioned earlier, group work increases the level of motivation of the students but group work alone is not sufficient to motivate all the students. As noted by Yuksel (2004), “One of the main claims of Sociocultural theory is that participants always co-construct the activity they take part in, in accordance with their own socio-history and locally determined goals” (p. 194).

A study conducted by Coughlan and Duff (1994) demonstrated that although five learners were shown an identical picture which all of them were asked to describe, their individual perceptions and cultural knowledge influenced the results. The study showed that in addition to having responses which differed from one student to another, the same task performed by the same person on two different occasions also gave different results. In the context of this study, Coughlan and Duff made a distinction between *task* and *activity*, task referring to the blueprint for the task as defined by the teacher, activity referring to the way students appropriated the task in function of their individual backgrounds.

A replicated study of Coughlan and Duff’s (1994) conducted by Yuksel (2004) gave very similar results. In his study, Yuksel recorded and analyzed the dialogues produced by ten Turkish graduate students while they were describing the exact same picture used in Coughlan and Duff’s study. He noticed that some students did more than simply describe the picture, as requested; they also used their imagination and made hypothetical statements. For example, one student used transition words in order to

create a coherent story. Another student used words such as “I guess, I think, maybe...” and created a very vivid and detailed story. This particular student went so far as to use her imagination to the point where she even described a man and a little boy as being the father and son and included actions that were not in the picture. For example, she described a little boy building a sand castle, whereas in the picture, we could only see a little boy playing in the sand. A third student simply stated in short sentences what she saw. The results of Yuksel’s study clearly confirmed that students viewed the task in a different way, either as a simple description of a picture or in more distinctive ways as related to their personal or cultural knowledge.

A study conducted by Marinette (1996) showed that when students perform an activity in order to learn or practice the target language, more scaffolding is provided. The claim that the way learners carry out a task may be influenced by the way they orient to it is also supported by Parks (2000) who analyzed the way three ESL college students invested in a task involving the production of a short video in their L2. The results showed that the learners engaged in the task differently depending on their individual motive, such as their desire to acquire a second language versus the need to fulfill the course requirement. As a result, the degree of investment in the task varied from one student to another and was influenced by the students’ beliefs regarding the effectiveness of classroom language learning, their preferences about the task and their attitude towards group work.

Studies by Storch (2001, 2002) further illustrate how the dynamics of pair work impact on language learning. Of particular note is her 2002 study in which she identified four different patterns of interaction: collaborative, where both students were fully engaged in the task; dominant-dominant, corresponding to a mutual and equal investment in the task; dominant-passive, indicating that one student was leading the activity; and finally expert-novice, referring to two students equally collaborating on the task although they had different levels of proficiency. The results showed that the collaborative and expert-novice groups were the most successful in terms of task completion..

3.3 Group Work in the Cooperative Learning Approach

Like group work, cooperative learning (CL) is a student-centered learning approach. However, it is of note that CL activities offer a more structured learning

environment compared to regular group work settings since students are not only required to interact with their team members but also to develop social and small group skills, and to take responsibility for their own and the group's success.

Over the past several decades, researchers in mainstream education have focused on a variety of aspects of the cooperative learning approach in order to demonstrate that learning through cooperative activities has a positive effect on students' academic achievement. Different aspects such as procedures (Johnson & Johnson, 1994), different approaches (Johnson et al., 1994, Slavin, 1994, 1995), motivation and self-esteem (Slavin, 1995) have been analysed. Results have shown that cooperative learning is an effective and successful approach to teaching which creates positive attitudes toward school and helps students develop interpersonal skills (Dörnyei, 1997; Johnson, Johnson and Holubec, 1990; Slavin & Cooper, 1999; Stevens & Slavin, 1995).

A meta-analysis done by Johnson, Johnson and Stanne (2000) which included more than 900 research studies validated the effectiveness of cooperative learning versus competitive and individualistic learning methods. Since the studies have been conducted over several decades by different researchers using different tasks in various countries, and since research participants were from different ages, cultural backgrounds, economic classes, and a variety of measures of dependent variables have been used, the fact that cooperative learning increases student achievement can be generalized.

Furthermore, since cooperative learning implies grouping students of diverse backgrounds, nationalities or levels of achievement together, which is not necessarily the case in group work, this approach is well known for its positive effects regarding social issues such as racism, sexism, inclusion of the handicapped, and fighting antisocial behaviours such as delinquency and bullying. Several studies have also suggested that cooperative learning reduces the feeling of loneliness and increases self-esteem.

However, although a great deal of research has shown the benefits of cooperative learning in mainstream education, very little research has investigated the implications of cooperative learning for second language learning. In this regard, I have only found two relevant studies: Naughton's (2006) and Mattar and Blondin's (2006).

In fact, although Naughton's (2006) research was done on university students and consisted of analysing the effects of teaching cooperative strategies on oral interaction,

this study is of relevance to the present research since it also refers to the number of turns taken by each student and to some types of scaffolding. For the purpose of that specific study, a program called the Cooperative Organization of Strategies for Oral Interaction (COSOI) was implemented in order to teach the use of the following four strategies: follow-up questions, requesting and giving information, repair, and requesting and giving help. The results suggest that when students are taught communicative strategies, the number of turns taken increases and a broader range of strategies are used to communicate. For example, the data indicated that the use of the second strategy for requesting and giving clarification almost tripled in the experimental group compared to the control one.

The most relevant investigation for the present research is Mattar and Blondin's (2006) study since it explored the interaction between elementary school students in a cooperative learning context. In setting up their study, Mattar and Blondin were particularly concerned with the problem of group work where participation by students may vary greatly. The experiment was conducted in two Grade 2 intact French L2 immersion classrooms and examined the turns taken in the L1 and L2 for each student, as well as the total quantity of oral utterances produced by the students. Seven different cooperative learning tasks designed by one of the researchers were used to carry out the investigation. Heterogeneous groups of four students were formed by the homeroom teachers and two groups per class were randomly chosen by the researchers for observation, which included audio-taping of the children's interactions.

Mattar and Blondin's study consisted of identifying if each one of the students of the team took turns during the activity, if all the students took turns in the target language and, finally, if the turns were equally distributed between each team member. To do so, the researchers coded the interaction based on two units of analysis: number of turns and number of words.

The results of the study suggested that all the students took turns during the cooperative learning activities and also, but to varying degrees, in the target language. This observation is important considering the fact that the students were only in Grade 2 at the time of the study and, even though they were part of an immersion program, had only limited skills in the target language. The main difference noticed between the two

classes corresponded to the number of utterances produced in the L1. According to Mattar and Blondin, this disparity is due to the fact that in one class there were no restrictions regarding the use of the L1, whereas in the other class, the L2 was consistently used by the teacher as well as by the students. The study also showed that the turn-taking was fairly equally distributed despite the heterogeneous nature of the groups.

3.4 Summary

This chapter discussed pair/group work interaction from the viewpoint of interactionist and sociocultural approaches. As seen previously, from an interactionist, cognitive-based perspective, language learning is primarily viewed as the way the individual mentally processes input. Within this perspective, the examination of interaction in pairs/groups has been primarily conducted within laboratory settings and has been largely centered on how certain types of tasks may be more conducive than others in terms of fostering negotiation of meaning. Sociocultural theories, on the other hand, see peer interaction as an opportunity to co-construct, with the help of others, the student's linguistic knowledge through external mediated activities which gradually becomes internalized by the learner. The setting where the activity takes place and the way the learners orient to the tasks are considered to be of particular importance in terms of task outcomes.

With respect to the empirical studies conducted on cooperative learning, the review of the literature demonstrates that most of the investigations were conducted in mainstream L1 contexts (Johnson, Johnson & Holubec, 1993; Slavin, 1990, 1999). This research provides substantial evidence that cooperative learning enhances the learner's level of motivation, has positive effects on students' achievement, and encourages interaction since it creates a risk-free environment (Johnson, Johnson & Stanne, 2000). By contrast, little research has been carried out in L2 classroom settings (Mattar & Blondin, 2006; Naughton, 2006). The objective of the present study is to help to fill the gap in this area through an investigation of children in an intensive ESL program.

Chapter 4: Methodology

4 Introduction

The chapter is divided into five main sections and documents the methodology used to carry out this research project. Section 4.1 documents the context of the study and includes details related to the Intensive English Program, the classroom physical environment and the teaching approach. Section 4.2 provides general information about the participants. Section 4.3 provides details related to the three main research instruments used in the study. Section 4.3 outlines the data analysis procedures pertaining to each one of the four research questions. Finally, section 4.5 refers to the ethical considerations pertaining to this study.

4.1 Context of the Study

The main purpose of the proposed research was to investigate how an intact English class of 29 elementary students in an intensive ESL program collaborated while engaged in cooperative learning tasks. The research was carried out during the second half of the 2007-2008 school year and was conducted in a public elementary school, in a Grade 6 classroom in Quebec City, more specifically in an intensive program based on a five-month model. This means that the students had covered the regular curriculum in French from September to January and had not received any English classes during this period. For the period starting mid-January until the end of the school year, the students received 25 hours of English per week for a minimum of 300 hours of English a year compared to 30 hours in the regular program. The study took place in a school where the Intensive English Program had been offered for the past sixteen years. At the moment of the study, the teacher counted an extensive twenty-five years of experience, including eight years as an English teacher for second language learners in the regular program and eight years as a special education instructor. She was teaching this specific program for the fourth year in that same school. Since only fifty-eight students are accepted in the program each year, more precisely one group of twenty-nine students beginning in September and one group of twenty-nine starting in January, the students must fulfil each one of the following four main requirements to be selected:

- should not be bilingual;

- complete a form where they express their interest toward the Intensive English Program;
- show good behaviour at all times;
- have good academic results, especially in French and Mathematics.

Additional criteria were also taken into consideration in the selection of the candidates such as the ability to work in teams and the capacity to achieve a lot within a short period of time. At the end of the school year, a trip to Toronto was organised.

4.2 Participants

The students in the class were Grade 6 French Canadian students aged between 11 and 12 years old. They began the academic year in September with their French language program and started the intensive English program on January 20th, 2008. They came from seven different schools and had studied English since Grade 3. Prior to this, they had always been in the regular program and had had little exposure with the English language outside the school system.

As all the students consented to be actively involved in the project, the teacher used the following mechanism to determine which eight students would be selected for the focal teams for the research project. To this end, the students were first grouped in teams of four based on their proficiency level so that each team consisted of one low, one high achieving, and two average students per group. Since there were twenty-nine students in the class, six groups of four and one group of five students were formed. The teacher wrote the names of all the students pertaining to each of the seven teams on seven different pieces of paper. A draw was then performed in order to select the two teams which took part in the study. In the present research study, a pseudonym was given to each student to maintain anonymity and confidentiality. All students remained with the same groups for all the nine cooperative learning activities related to the research project. Although groups including from two to six students are known to be effective, groups of four students are considered the most effective group size according to Kagan (1989). Therefore, groups of four students were used in this study and two heterogeneous groups of four students were observed for the purpose of this project for a period of three school weeks.

4.3 Research Instruments

In the present study, three main instruments were employed to collect the data: Observation, videotaped recordings of student interaction and interviews.

4.3.1 Observation

During the second week of the programme, the researcher observed in class during three entire days and took detailed notes pertaining to the classroom environment, interaction and type of activities performed by the teacher. Observing in class was crucial in order to, first, get familiar with the classroom physical environment and, second, get familiar with the teacher's pedagogical approach.

The large classroom was decorated with colorful and useful posters and signs, plants and even an aquarium with fish. The entire external wall was covered with large windows which provided natural light. Five big rectangular tables which could easily seat up to eight students each were arranged in a half circle facing the teacher's desk and one of the two big blackboards. In fact, the classroom was set up in order to provide a warm, appealing and friendly atmosphere and to encourage interaction between the students. There were several bookcases filled with board games, dictionaries, novels and supplies. Three computers were facing one of the walls and were used for long term projects or as a reward for good behavior.

The teacher generally used a student-centered approach and oral communication was predominant in the classroom. Although the teacher did not qualify herself as using a cooperative learning approach, the first interview which took place at the beginning of the school year and the first observation in class with one of her groups revealed that she used certain activities which fall into cooperative learning such as the jigsaw activity. The teacher also mentioned that, on occasion, she used some roles such as the reporter or material manager. For the purpose of this study, the teacher agreed to use cooperative learning activities in class and felt that the research project was a good opportunity for her to try out new ones.

According to the teacher, the classroom was the only opportunity for the students to practice the target language. Therefore, the important thing for the teacher was to

create a risk free environment where the students would feel comfortable using the L2 but also to define a physical area where English was mandatory at any time for everyone. The first thing I noticed when entering the classroom was a red tape on the floor indicating what the teacher called the “English Zone”. As well, each student who was caught speaking French in class was given a yellow card on which it was written “Because I spoke French, I have a copy tonight”. The assignment had to be handed in the following day. However, during the first few weeks of the program, the students were allowed, in particular situations such as sharing an anecdote, to ask for a “Time Out” in order to express themselves in French. The “Time Out” was forbidden in situations where the teacher judged that the student had the appropriate knowledge to use the L2.

The researcher noticed that, although the students only had a basic and quite limited knowledge of the English language, each student interacted with their classmates or with the teacher in English on a regular basis. To ensure that everybody would participate in short conversations in English at least twice a day, each student had been assigned a number at the beginning of the school year and each number was written on a wooden popsicle stick placed in a box on the teacher’s desk. Twice a day, the teacher would pick a stick and call the number. The student then had to choose a partner and improvise a small talk using complete sentences in English. Randomly, the teacher picked one student per day and evaluated them on the way they interacted with others.

During the observation, the researcher noticed that the teacher generally used a great variety of tasks mainly based on oral communication. Since no pedagogical method was available for intensive programs, the teacher created her own material and activities, frequently using short-term and long-term projects. She mentioned that she was teaching grammar in context and using projects and tools such as graphic organizers before the new curriculum. In fact, the only thing she modified when the new curriculum became obligatory were aspects of her teaching related to the evaluation of processes.

The teacher considered that individual work should be done at home and that classroom time should be used to interact with others. As a result, only roughly twenty percent of the time was used for teaching purposes or individual work. Although the teacher favored teaching grammar in context, she considered that, for some students, learning in context provided too much information and therefore, thought it was

necessary to teach some grammar points more precisely and ask the students to perform more traditional exercises in class or preferably as homework. Fifty percent of the classroom time was allowed for pair work or pair interaction and thirty percent was used for group work through projects. The main focus being on oral communication, at the end of each project, the students were asked to come up in front of the class and present their project to the group.

The observation also allowed the researcher to notice that the teacher had established a simple daily routine. The teacher considered this activity very important since it offered a predictable and structured environment and was a good way to get students to think in English. After greeting the students, the teacher would begin the class by randomly asking two or three students very simple questions such as: "How are you? Did you have a good lunch? What did you eat? What is your favorite...?" The teacher insisted on the fact that the students had to answer in complete sentences and used all opportunities to correct either explicitly or implicitly the students' utterances or pronunciation. This activity was always followed by student-student interaction where one student had to stand up, choose a classmate and ask one or two questions similar to those modeled by the teacher. This activity went on until everybody had talked.

One of the main objectives for the teacher was to help students work efficiently in pairs or in teams of four. The teacher, throughout the activities, was continually insisting on the use of these social skills when interacting with others. Several signs and posters on the walls provided examples of functional language to use when interacting with others such as: "How do you say X in English?", "Can you repeat please?", "What did you say?", "Can you speak slower please?" The researcher noted that during the three days she observed, all students participated very well, were very attentive and showed a great motivation in using the target language in class but also outside the classroom where the use of the L2 was not required such as in the hallway or the schoolyard.

4.3.2 Videotaping Learners' Interaction

Videotaping of the two focal teams was carried out using two professional Sony MiniDV digital camcorders with integrated sound and images mounted on portable tripods. Two sets of four Sony digital wireless clip-on microphones were connected to a

mixer. Each mixer was then plugged into a camera through a transformer called "Beachteck" which helped modulate the sound. The use of the camera was essential in the present study since scaffolding also includes non-verbal behaviour such as body language, facial expressions, and gestures. As discussed earlier, scaffolding can be as simple as pointing at an item on a sheet of paper, searching in the dictionary, or nodding to indicate approval. The use of this equipment ensured that a recording of a high technical quality was obtained. The data used for the analysis of the interaction involved sixteen mini digital video cassettes which provided a total recording of approximately 12 hours. The data collection should have included eighteen cassettes in total. Unfortunately, due to technical problems, the data of the third Heads Together activity recorded on two different cassettes could not be analysed.

4.3.3 Interviews

Two semi-structured interviews were conducted with the teacher previous to and following the data collection phase with the students. A semi-structured interview, according to Kajornboon (2005), consists of non-standardized conversations in which the interviewer uses a list of key questions as a guideline but where additional questions not anticipated in the beginning of the interview are also allowed. This type of interview provides freedom to the interviewer and allows the researcher to "prompt and probe deeper into the given situation." (p. 6). The objective of the first interview was to obtain information pertaining to the teacher's biographical background and pedagogical approach, including her perception of group work and cooperative learning, and strategies used by her to encourage the students to communicate in the target language. Both interviews were recorded and transcribed. The purpose of the interviews was not related to the research questions as such. Rather, as this was a qualitative study, the purpose was to obtain information relevant to the context in which the study was carried out. (For questions used in the interviews, see Appendix D.)

4.4 Tasks

For the purpose of this study, three different types of oral cooperative learning tasks linked to topics familiar to the students and designed by the researcher were used in

class: 1. Numbered Heads Together, 2. Jigsaw, and 3. Roundrobin/Roundtable. These three types of activities were developed in order to stimulate negotiation of meaning and form. The three types of activities were discussed with the teacher and examples of the different tasks were presented to her prior to the beginning of the project.

For the Heads Together activity type, a DVD called "Cooperative Learning: Heads Together Grade 6" was shown to the teacher in order for her to better understand what was expected from her. The recording showed an ESL elementary teacher carrying out a Heads Together task in a Quebec elementary classroom context and was followed by an interview with the teacher, which provided additional information as to how to present the task to the students and what to expect from them.

Although students were asked to work in pairs or in small groups on a regular basis, they had not experienced any cooperative learning activities as such in this class before the study was carried out.

For practice and in order to ensure that the tasks were appropriate for students of this age and level, one activity of each type had been previously used with another Grade 6 class of elementary school ESL learners in the intensive program of the same school with the same teacher. These latter activities were performed towards the end of the program as in the present research project. For the practice session of the Heads Together Activity, the researcher, at the teacher's request, gave the instructions and carried out the task with the students so as to model it for the teacher. Since the teacher was familiar with the Jigsaw activity, she felt comfortable presenting this task to the students herself. In the case of the Roundrobin/Roundtable activity, the researcher's role was restricted to assisting the teacher when she gave the instructions. The cooperative learning tasks with written instructions which were used for the present student are provided in Appendices B, C, and D

For the research project, since the students had already been filmed in this class by student teachers, the use of a video camera and microphones was not a factor that the researcher thought would intimidate the students; therefore, no practice with the equipment was done before the actual project. Three activities of each type were subsequently carried out and the interaction between the members of the two focal teams recorded and analysed. Due to a technical problem, the third Heads Together task could

not be recorded. Therefore, a total of eight transcriptions were analysed. All activities were carried out by the regular classroom teacher towards the end of the school year in May 2008. Figure I provides an overview of the scheduling for the various activities related to the research project.

Figure I. Schedule for activities related to the research project

Date	Period	Activity
Thursday, May 1	2:15 - 3:15 pm	Gave her consent forms (Appendix E), lesson plans and copies of the activities (Appendices A-B-C). Explained the project in greater detail and answered questions. Took detailed notes of classroom environment. Recorded interview 1 (Appendix D) with the teacher in her classroom.
Tuesday, May 6	All day	Met with the students, collected consent forms and answered questions. Observed in class and documented teacher's pedagogical methods and student interaction.
Wednesday, May 7	All day	Observed in class; took notes.
Monday, May 12	All day	Observed in class; took notes. Videotaped one classroom period in order to test the equipment and get students used to the presence of the equipment.
Wednesday, May 14	9:15 to 10:15	Task 1: Heads Together Picture cues: Poster 1: Illustrates teenagers playing soccer Poster 2: Represents a young girl biking Poster 3: Shows two kids throwing snowballs
Wednesday, May 14	1:00 to 2:00	Task 2: Jigsaw Topic: A trip to Mount Ste-Anne
Thursday, May 15	2:15 to 3:15	Task 3: Roundrobin / Roundtable Topic: Fred the Frog
Tuesday, May 20	10:30 to 11:30	Task 4: Heads Together Picture cues: Poster 1: Illustrates 2 girls at the beach. Poster 2: Shows a town house where a mother is gardening and a little girl is behind a window waving at her mother. Poster 3: Represents a circus
Tuesday, May 20	1:00 to 2:00	Task 5: Jigsaw Topic: A trip to the Supermarket
Wednesday, May 21	10:30 to 11:30	Task 6: Roundrobin / Roundtable Topic: Puppy's ski trip.

Tuesday, May 27	1:00 to 2:00	Task 7: Roundrobin / Roundtable Topic: Melissa's trip to Paris
Thursday, May 29	1:00 to 2:00	Task 8: Jigsaw Topic: A trip to the zoo
Thursday, May 29	2:15 to 3:15	Task 9: Heads Together Picture cues: Poster 1: Shows a young boy brushing his teeth Poster 2: Shows two women in a kitchen Poster 3: Illustrates a little girl buying a dog at a Pet Shop
Thursday, May 29	3:15 to 4:00	Recorded interview 2 (Appendix D) with the teacher.

4.3.1 Task Type: Numbered Heads Together

The first activity presented to the students was a Numbered Heads Together task type where students had to describe drawings illustrating one or two characters performing an action. The main purpose of this activity was to share ideas, listen to their team mates and be ready to answer the questions following the discussion. The Numbered Heads Together type activity was divided into four steps. First, each team of four was given a number and each student per team was also given a number from 1 to 4. Second, the teacher was asked to stand in front of the class, show one of four poster size drawings and ask specific questions related to each poster. A black and white copy of the drawings can be found in Appendix A.

A total of four or five questions per drawing were asked such as: What do you see on the poster? Where does the action take place? What are the people doing? What are they wearing? The third step consisted of students putting their heads together in order to come up with the answers. After each question, the students were given a few minutes to discuss in their teams so all would potentially be ready to answer if called on by the teacher. They had to include as many details as possible and answer with complete sentences. Finally, the teacher randomly called on a team and team member number and the student with that specific number was asked to answer the question, for example, team 4, student 1. Only the student corresponding to the number called by the teacher was allowed to answer the question.

4.3.2 Task Type: Jigsaw

The second type of activity presented to the students was a Jigsaw task (see Appendix B for a copy). A jigsaw task or information gap task was designed so as to encourage students to exchange information in order to successfully perform the task. According to Pica et al. (1993, cited in Smith, 2003 p. 42), this type of information gap task "(...) should elicit a high degree of negotiation of meaning". Although very effective, the jigsaw structure can, sometimes be complex and time consuming. In the present study, a simplified jigsaw structure involving a crossword puzzle was used. The three different topics which were covered were animals, food and winter activities.

The activity was performed as follows. Each team received one answer sheet with a crossword puzzle which covered one specific topic. The teacher distributed one envelope per team which included four different cards entitled Student A, B, C and D. Each card revealed a different piece of information about the key words that had to be written down on the answer sheet. Without looking at their partners' cards, students, in turn, were asked to read their clues and interact orally so as to find the key word answers. Once all the key words were written in on the crossword puzzle, the students were able to discover the secret word or message. When the activity was over, the students were asked, as a group, to answer the following two questions: Did every student speak English during the activity? Did every student participate equally in the task? To do so, the students simply had to circle the smiley face corresponding to their performance on the task. This last step corresponds to the fifth principle proposed by Johnson and Johnson, i.e., group processing, and encourages students to reflect on their group work.

4.3.3 Task Type: Roundrobin / Roundtable

The third and last activity type was a Roundrobin/Roundtable task where students had to describe a cartoon representing a series of eight pictures. The Roundrobin/Roundtable activities, which involved narration, can be found in Appendix C. According to Skehan and Foster (1999), this type of task generates "great fluency in performance" (p. 99). To perform this activity, each team received an envelope including eight cards numbered from 1 to 8 and a two-page answer sheet on which they had to write a story based on the pictures. Each student received a set of two cards joined together by

a paper clip. Each card was glued onto a colored piece of construction paper and each student had a different color. For example, student A received pictures 1 and 5 corresponding to a red piece of construction paper, student B received pictures 2 and 6 corresponding to a blue piece of construction paper, and so on.

On the answer sheet there was a photocopy of each picture which was followed by a small colored square to indicate which student had to write the sentence. In other words, in turn, each student was given the role of secretary and this student was different from the one telling the story. For each one of the drawings, three lines were available for the students in order for them to write a minimum of one sentence for each scene represented on each card.

The activity was performed as follows: Each student was asked to hold their two cards in their hands. In turn and one picture at a time, one student would place his/her drawing face up on the table and would describe the picture. Following this, the other team members had the opportunity to add details, but all had to reach a consensus as to what to write on the answer sheet; the student acting as secretary had to write down the story on the answer sheet. Students continued working like this until a short paragraph was written for each one of the eight pictures.

The final step was once again to fill out the evaluation form regarding the group performance during the activity. The same format for the evaluation form as in the preceding activity was found at the bottom of the answer sheet.

4.5 Research Questions and Data Analysis

The recordings of the videotaped interaction were transcribed in a Word document which resulted in a written version for a total of 106 pages. The information was then analyzed in order to answer each one of the four research questions. For an overview of the research questions and data analysis procedures, see Figure II.

Figure II. Research questions and data analysis procedures

Research Questions	Data analysis
Q1) While performing cooperative	Total turns and words per student for each

learning activities, does each student of the team take turns in the conversation?	of the 9 CL activities
Q2) While performing cooperative learning activities, does each student of the team take turns in the target language?	Total turns for each student with number of words in the target language (L2) and the first language (L1) for each CL activity
Q3) While performing cooperative learning activities, are the turns equally distributed between the students?	Total turns for each student with raw scores and percentages for each of the CL activities
Q4) While performing cooperative learning activities, do the students provide each other scaffolding, and if so, what types are provided?	A taxonomy for the analysis of scaffolding developed using the data obtained and drawing on schemes produced by scholars published in the literature.

4.4.1 Research Questions 1, 2 and 3

In order to answer questions 1, 2 and 3, the researcher, as in Mattar and Blondin's (2006) study, for each of the cooperative learning activities, counted the number of turns taken by each student in the L1, in the L2 and using both the L1 and the L2 (henceforth, referred to as bilingual turns) and the number of words produced by each student in the L1 and the L2. The average number of words per student was also calculated. Following Mattar and Blondin (2006), "turn-taking" is defined as "toutes les productions orales consécutives d'un enfant, généralement précédées et suivies par les productions d'autres enfants, voire de l'enseignant, ou par un silence", (p. 236) ("any uninterrupted oral interaction produced by a child, generally preceded or followed by another child, the teacher or a period of silence"). As turns can vary in length, a count of the number of words per turn was used to gauge turn size. Consistent with Mattar and Blondin, all words clearly identifiable as such were counted, including words which are repeated. Contractions (e.g., *it's*) counted as two words. However, filler words such as *eh*, *hm* or incomplete words did not count. The results are presented in tables as raw scores and percentages in function of each activity and each student.

4.4.2 Research Question 4

In order to answer question number 4, the transcription of the interaction was analysed and segments of the exchanges showing students engaged in scaffolding were identified. This initial analysis suggested that three categories of episodes involving scaffolding were present in the data : language-related episodes, content-related episodes and task-related episodes. However, for the purpose of this study, it was decided to limit the analysis to linguistic-related scaffolding; task and content-related episodes of assistance were therefore not taken into consideration. All selected episodes were revised several times in order to ensure that the segments identified were only related to language assistance and were appropriately categorized.

For the purpose of identifying scaffolding strategies, the unit of analysis retained was the language related episode (LRE). Based on Swain and Lapkin (1998), a LRE is defined as “Any part of a dialogue where the students talk about the language they are producing, question their language use, or correct themselves or others.”

Since the purpose of our research project was to investigate the way students scaffold each other and the definition of scaffolding retained for this study is that of a “process by which tutors -parents, caretakers, teachers, or more expert partners help someone less skilled solve a problem” (De Guerrero & Villamil, 2000, p. 52), instances of self-correction were not taken into account. As such, for the purpose of this study, Swain and Lapkin’s definition of a LRE was slightly modified to read as follows: “Any part of a dialogue where the students talk about the language they are producing, question their language use, or correct others”.

A reiterative analysis of the transcriptions allowed the researcher to identify different types of LREs, build a list of categories and finally create a taxonomy. The researcher took into consideration the categories identified by previous researchers. Although the taxonomy was primarily developed in accordance with Foster and Ohta’s (2005) analysis, items from Villamil and De Guerrero’s (1996) taxonomy, as well as categories defined by Wood et al. (1976) were drawn on. In order to facilitate the reading of the transcripts, a list of transcription symbols was also created mainly based on Jefferson’s (1984) transcription conventions. The symbols and descriptions can be found in Figure II.

The analysis of the transcriptions allowed the researcher to identify nine different types of scaffolding strategies related to LREs which are: co-construction, confirmation check, continuer, comprehension check, instructing, marking of critical features, other-correction, request for assistance, and use of resources. Examples for each type are provided in Figure III. The taxonomy is divided into three columns. Definitions and examples pertaining to previous researchers' definitions are indicated in the first column. Definitions retained for this study are either accepted as is or modified and this is indicated in the second column. The changes introduced into previously published definitions are indicated in italics in order to facilitate reading. Examples of each type of category were taken from the data collected in the present study and can be found in the third and final column.

In addition to identifying the types of scaffolding provided by the students, the number of instances of successful and unsuccessful assistance was also counted. (see Figure III). In this analysis, *successful* is used to indicate that the answer or explanation provided by a more expert other, i.e. a peer or a qualified tutor (i.e., teacher, student-teacher or researcher), was correct whereas *unsuccessful* means that either no help was provided in response to an expressed need or that the help provided was inadequate or incorrect.

The analysis also revealed evidence that one or more attempts to get or give scaffolding for a given problem could be embedded within a given language-related episode. Thus, from a purely quantitative perspective, there are more attempts at scaffolding than actual language-related episodes. In Figure III, for example, for language-related episode 6, there were two attempts at scaffolding, one unsuccessful and the other successful.

To determine whether the help provided was reinvested/used by the student, instances of uptake were identified. *Uptake*, as defined by Lyster and Ranta (1997), refers to "a student's utterance that immediately follows the teachers' feedback and that constitutes a reaction in some way to the teachers' intention to draw attention to some aspect of the student's initial utterance". For the purpose of this study, the term *uptake* was used to indicate that a student in the team used the corrective feedback provided by a more expert other (e.g., peer, teacher). The student could be the person who had

originally made the mistake or a peer who heard the corrective feedback and used it in the ongoing discussion; the main point here is that the corrective feedback was picked up by someone in the team and actually repeated/used.

Two types of uptake were identified: appropriate or inappropriate. *Appropriate uptake* refers to corrective feedback that was correct. *Inappropriate uptake* refers to instances where the feedback provided was incorrect (i.e. an error) and was picked up on and repeated by the students.

Figure III. Example of language-related episode

Episode 6	Request for Assistance: Explicit	(Student A is describing the character she sees on the poster) A: how do you say "rides"?
	Unsuccessful	K: what? A: "ride" (no help provided by students)
	Request for Assistance: Explicit	K: Mrs. (addressing the teacher)! how do you say "rides"?
	Successful	Teacher: wrinkles.
	Uptake: Appropriate	A: she has a wrinkle in the cheek.

An English-speaking rater with a graduate degree in Applied Linguistics coded the scaffolding strategies based on the taxonomy developed by the researcher. Coding criteria were provided (Figure IV) and orally explained by the researcher. The first recording for each of the three different cooperative learning tasks was used in a training session. The rater was then asked to independently code the remaining episodes. The independent rater and the researcher agreed on the coding of 96% of the instances of scaffolding, which indicates the scaffolding taxonomy was highly satisfactory.

Figure IV. Transcription conventions

Transcription Symbols	For Marked:
?	Rising intonation (final)
.	Falling intonation (final)
,	Continuing intonation (non-final)
!	Surprised
WORD IN UPPER CASE	Emphasis
C-A-P-S	

<i>"Italics"</i>	Spelling out a word
[]	A French word or utterance
[əpostrəf]	Something being read aloud
(.)	Pronunciation. Often used for French words pronounced with an English accent, e.g. [əpostrəf] referring to the French word "apostrophe" [apostrof] and the English word apostrophe [əpəstrəfe]
co:lon	A short pause
()	Extension of the sound or syllable
<u>Underline</u>	Transcriber's commentaries
	Identification of relevant aspects of a scaffolding strategy in more complex or longer episodes

Figure V. Taxonomy of scaffolding strategies

N.B. Definitions. Italics are used to indicate changes/additions to the original definition.

Strategies for providing scaffolding (As defined by previous researchers)	Definitions (Retained for the present study)	Examples (Taken from the data in this study)
	<p>Request for Assistance <i>Refers to when a speaker is inquiring, on his own initiative, for information or help from his or her partners in order to solve a linguistic problem related to the spoken or written language. Requests for assistance can be explicit or implicit and always require that the interlocutor provide either new information or rephrase what was previously said. Explicit requests for assistance are formed by wh-questions or yes-no questions whereas implicit requests are often preceded by expressions such as "I don't know what to say" without explicitly asking for help. Requests for assistance may involve identifying the targeted item through code-switching and/or non-verbal cues such as facial expression.</i></p>	<p><u>Explicit requests (spoken language)</u> B: what is briefcase? Researcher: briefcase is when you go to work. I have a briefcase. when I travel, when you go on a trip, you have a suitcase or luggage. A: how do you say "valise"? Researcher: luggage</p> <p><u>Explicit request (written language):</u> (Referring to a sentence written on a card: "It's hard to see through me") M: How do you write through? A: T-H-R-O-U-G-H</p> <p><u>Implicit request (spoken language)</u> (Referring to a card) S: I don't know how to say that.</p> <p>(Student M reading her clue during a jigsaw activity) M: "We have a shell" B: <u>shell?</u> (intonation and facial expression indicating an unknown word) K: "carapace" (French word for shell)</p>

		<p>T: he says wow! when he look at the skis: (Hesitation on the plural form of the word skis). B: (Student B nods for yes to indicate that the word on the students' answer sheet was correctly written.)</p> <p><u>Implicit request (written language)</u> (Students comparing a card with a picture and the answer sheet where a similar picture is illustrated) S: Mrs. (addressing the teacher)! we have a little mistake because (.) there, it's written ski boundary area and there it's written danger. Teacher: danger. it's the same thing.</p>
<p>Comprehension Check Foster & Ohta (2005) (Long, 1980: 81-2, original emphasis) ``Any expression [...] designed to establish whether that speaker's preceding utterance(s) had been understood by the interlocutor. They are typically formed by tag questions, by repetitions of all or part of the same speaker's intonation, or by utterances like <i>Do you understand?</i> which explicitly check comprehension by the interlocutor``</p>	<p>Comprehension Check Any expression [...] designed to establish whether that speaker's preceding utterance(s) had been understood by the interlocutor <i>or whether a word or words used by the interlocutor but read from a written source had been understood.</i> They are typically formed by tag questions, by repetitions of all or part of the same speaker's intonation, or by utterances like <i>Do you understand?</i> which explicitly check comprehension by the interlocutor.</p>	<p>(Student K reading her clue during a jigsaw activity) K: "<i>I'm very useful</i>" Researcher: I'm very useful, <u>what does it mean useful?</u> M: "utile" (French word for useful)</p>
<p>Co-Construction Foster & Ohta (2005) ``[...] joint creation of an utterance, whether one person completes what another has begun, or whether various people chime in to create an utterance. Co-constructions are seen as allowing learners to participate in forming utterances that they cannot complete individually, building language skills in the process.``</p>	<p>Co-Construction Accepted as is.</p>	<p>(Students describing a poster during a jigsaw activity) S: The boy try to (.) B: to catch? S: catch the ball.</p>
<p>Confirmation Check Foster & Ohta (2005) (Long, 1980: 81-2, original emphasis)</p>	<p>Confirmation Check "Any expression [...] following an utterance by the interlocutor</p>	<p><u>Repeating a simple word</u> (Student K reading her clue during a jigsaw activity)</p>

<p>“Any expression [...] following an utterance by the interlocutor which was designed to elicit confirmation that the utterance had been correctly understood or correctly heard by the speaker. Confirmation checks are always formed by rising intonation questions, with or without a tag (the man? or the man, right?) They always involve repetition of all or part of the interlocutor’s preceding utterance. They are answerable by a simple confirmation (yes, Mmhm) in the event that the preceding utterance was correctly understood or heard, and require no new information from the interlocutor.”</p>	<p>which was designed to elicit confirmation that the utterance had been correctly understood or correctly heard by the speaker. Confirmation checks are always formed by rising intonation questions, with or without a tag (the man? or the man, right?) They <i>may</i> involve repetition of all or part of the interlocutor’s preceding utterance. They are answerable by a simple confirmation (yes, Mmhm) <i>or by providing or repeating a targeted word</i> in the event that the preceding utterance was correctly understood or heard, and require no new information from the interlocutor”.</p>	<p>K: “<i>You often have to pay to use me</i>”. B: PLAY K: PAY. B: ah! I understand to pl:ay.</p> <p><u>Providing / repeating a simple word</u> (Student M reading her clue during a jigsaw activity) M: “<i>You can get food here</i>” A: you CAN or you CAN’T? M: you can:</p>
<p>Continuer Foster & Ohta (2005) “They [continuers] function to express an interlocutor’s interest in what the speaker is saying and to encourage the speaker to go on.”</p>	<p>Continuer “‘They [continuers] function to express an interlocutor’s interest in what the speaker is saying and to encourage the speaker to go on”. <i>Continuers may also occur when a student indicates to the interlocutor that the utterance is incomplete by raising intonation.</i></p>	<p>(Student B wants Student A to give her the answer sheet) B: give A: GIVE? (emphasising the word in order for the student to notice that there is a word missing) B: me (meaning give me the answer sheet please) A: give me.</p>
<p>Instructing Villamil and De Guerrero (1996) “Giving “mini” lessons on grammar, vocabulary, stylistic conventions, or other aspects of writing.”</p>	<p>Instructing <i>Refers to when a more expert other gives “mini” lessons on grammar, vocabulary, stylistic conventions, or any other aspect related to speaking or writing”.</i></p>	<p><u>Provided by a student:</u> (While student S is writing down what student T is saying, student P is looking on the answer sheet). T: after he goes to the living room and he see <u>is</u> gift P: we need an H before the IS. If not, it’s the verb to be.</p> <p><u>Provided by the teacher:</u> (The teacher is walking around and hears student A saying something wrong) A: and hé have a lot of fun Teacher: he has. <u>3rd person singular; don’t forget!</u> he has a lot of fun.</p>
<p>Marking of Critical Features Wood at al. (1976) “A tutor by a variety of means marks or accentuates certain features of the task that are relevant. His marking provides</p>	<p>Marking of Critical Features “<i>A more expert other by a variety of means marks or accentuates certain features “of the task” that are relevant. His marking provides information about the</i></p>	<p><u>Marking a feature:</u> (Students describing what they see on the poster during a jigsaw activity) A: they both are wearing red nose (.) and (.) how do you say a</p>

<p>information about the discrepancy between what the child has produced and what he would recognize as a correct production.”</p>	<p>discrepancy between what the interlocutor has produced and what he would recognize as a correct production”. <i>The expert can also anticipate a problem which the novice might be inclined to make.</i></p>	<p>“une affaire que l’on met sur la tête”? (looking for the word wig) Teacher: une perruque? <u>it starts with the letter W.</u> do you remember? M: wig.</p> <p><u>Anticipating a problem:</u> (Roundrobin / roundtable: The students are starting to write a story in the past) K: once upon a time Teacher: <u>and then you’ll have to write in the past</u></p>
<p>Other-Correction Foster & Ohta (2005) “a peer correcting his or her partner when there is no signal from the interlocutor that there is a problem of any kind”.</p>	<p>Other-Correction <i>Refers to when a more expert other indicates that what the interlocutor said was incorrect and provides correction related to grammar, pronunciation or vocabulary words.</i></p>	<p><u>Related to grammar</u> P: from Paris, she call her parents T: she calls: with an S P: she calls: her parents.</p> <p><u>Related to pronunciation</u> B: “I’m a big mammal” K: “I can be very dangerous” A: “I have brown, white or black fur” K: it’s a beer [bir] A: a BEAR! [ber] B: a BEER it’s “une bière”.</p> <p><u>Related to vocabulary words</u> (Student S wants Student T to repeat the clue written on her card during a jigsaw activity) S: can you repeat your answer T: (querying the use of the word <i>answer</i>) your question? your clue? S: yes. can you repeat your clue? T: “I’m very useful”.</p>
	<p>Use of resources <i>Refers to different ways to continue on with the task either by resorting or recommend the use of material resources (poster, word bank) human resources (teammates, teacher, researcher).</i></p>	<p><u>Using of material resources</u> B: [...] how do you say “point” T: “point”? (<u>points to a cardboard on the wall</u>) B: period.</p> <p><u>Recommendation of resources:</u> <u>Material resources</u> B: how do you say “tempête”? Researcher: <u>look it up in the dictionary</u> B: (takes the dictionary) ah! yes, the dictionary (Few minutes later) B: “tempête” it’s a snowstorm</p>

		<p><u>Recommendation of resources:</u> <u>Human resources:</u> A: how do you say “sable”? Teacher: <u>did you ask somebody in your team?</u> A: yes but (.) B: she said sable [sābəl] (Pronounced the French word with an English accent)</p>
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4.5 Ethical Considerations

The present research project was submitted to and approved by the Laval University Ethics Committee. In accordance with the recommendations by the Ethics Committee, the students were informed that they were free to refuse to be filmed. The researcher clearly explained both in class and in two written documents, one for the students and one for the parents, that the camera would be set to ensure that only the students who consented to be videotaped would be filmed from the back of the class while the teacher was giving the instructions for the activities. The researcher also told them that only the students who accepted to be videotaped and to have their voices recorded would be filmed while performing the activities in small groups. Letters and consent forms which were distributed to the various participants can be found in Appendix E.

4.6 Summary

This chapter has provided an overview of the methodology used in order to analyse the data collected in the present research study. The next chapter presents the results for the four research questions.

Chapter 5: Results

5 Introduction

The previous chapter provided general information about the context of the study and discussed the methodology used in this research project to analyze the interaction between the students when working on cooperative tasks. This chapter reports on the results and is divided into four main sections, each one pertaining to the four research questions addressed in this study: While performing cooperative learning activities, does each student of the team take turns in the conversation? (section 5.1); Does each student of the team take turns in the target language? (section 5.2); Are the turns equally distributed between the students? (Section 5.3); Do the students provide each other scaffolding, and if so, what types are provided? (Section 5.4).

5.1 Research Question 1: *While performing cooperative learning activities, does each student of the team take turns in the conversation?*

The results of the analysis, as indicated in Table 5.1, show that each student took a substantive number of turns during each activity. For Team 1, the total number of turns produced corresponds to 1 588 and ranged between 285 and 500 turns per student whereas the total number of turns for Team 2 equals 2 113 and ranged between 439 and 626 turns per student.

Table 5.1
Number of turns per student per activity: Teams 1 and 2

Team	Heads Together (2)*	Jigsaw (3)*	Roundrobin / Roundtable (3)*	Total Number of Turns
Team 1				
Brittany (H)	103 (26%)	171 (31%)	226 (35%)	500 (32%)
Andrey (A)	154 (39%)	178 (32%)	145 (23%)	477 (30%)
Maisha (A)	78 (20%)	104 (19%)	103 (16%)	285 (18%)
Kaila (L)	57 (15%)	100 (18%)	169 (26%)	326 (20%)
Total	392 (100%)	553 (100%)	643 (100%)	1 588

Team 2				
Bianca (H)	176 (32%)	206 (30%)	244 (28%)	626 (29%)
Patricia (A)	106 (19%)	178 (26%)	181 (21%)	465 (22%)
Tania (A)	117 (21%)	124 (18%)	198 (23%)	439 (21%)
Shaila (L)	158 (28%)	189 (27%)	236 (28%)	583 (28%)
Total	557 (100%)	697 (100%)	859 (100%)	2 113
Total	949	1 250	1 502	3 701
Teams 1-2				

Note: H = high achiever, A = average achiever, L = low achiever
(X)*: Represents the number of tasks for each type of CL activities

5.2 Research Question 2: *While performing cooperative learning activities, does each student of the team take turns in the target language?*

As shown in Table 5.2, the results revealed that out of the 3 701 turns taken during the activities, each student produced a minimum of 90% of the turns in the target language and that some of them even produced up to 98% of the utterances only in English. This high percentage of participation in the target language indicates that students were positively engaged in the activities and conscious of the importance of using the L2. As depicted in the bilingual column, only 4.5 % of the turns were produced in both French and English and 1.3 % in the mother tongue. The comparison of the results for both teams revealed that the proportion of turns taken in English, in French and bilingual is rather similar .

Table 5.2
Number of turns per student

Students	Total Number of Turns	Average Number of Words / Turn	Number of Turns in English	Number of Turns in French	Number of Turns Bilingual
Team 1					
Brittany (H)	500 (32%)	6.2	460 (92%)	8 (2%)	32 (6%)
Andrey (A)	477 (30%)	4.7	427 (90%)	11 (2%)	39 (8%)
Maisha (A)	285 (18%)	5.1	273 (96%)	4 (1%)	8 (3%)
Kaila (L)	326 (20%)	4.0	298 (91%)	10 (3%)	18 (6%)

Team 2					
Bianca (H)	626 (29%)	6.5	595 (95%)	7 (1%)	24 (4%)
Patricia (A)	465 (22%)	5.8	455 (98%)	2 (0%)	8 (2%)
Tania (A)	439 (21%)	4.7	430 (98%)	2 (0%)	7 (2%)
Shaila (L)	583 (28%)	6.9	551 (94%)	3 (1%)	29 (5%)
Total Teams 1-2	3701 (100%)	5.5	3489 (94.2%)	47 (1.3%)	165 (4.5%)

Note : H = high achiever, A = Average achiever, L = low achiever

In addition to the number of turns produced in English, in French and bilingual, the number of French words produced in total by each student was also tabulated. As illustrated in Table 5.3, French, was used on only rare occasions. In fact, the analysis of more than 13 hours of oral interaction revealed that out of the 21 208 words produced by the students, only 4% of these words were produced in French (see Table 5.3).

Table 5.3
Participants and total number of words per student

Student	Total no. of English words	Total no. of French words	Total no. of words
Team 1			
Brittany (H)	3006 (96%)	140 (4%)	3146
Andrey (A)	2034 (89%)	239 (11%)	2273
Maisha (A)	1338 (98%)	29 (2%)	1367
Kaila (L)	1095 (88%)	156 (12%)	1251
Team 2			
Bianca (H)	4012 (98%)	89 (2%)	4101
Patricia (A)	2745 (99%)	34 (1%)	2779
Tania (A)	2131 (100%)	7 (0%)	2138
Shaila (L)	4050 (98%)	103 (2%)	4153
Total Teams 1 and 2	20 411 (96%)	797 (4%)	21 208 (100%)

Note : H = high achiever, A = average achiever, L = low achiever

5.3 Research Question 3: *While performing cooperative learning activities, are the turns equally distributed between the students?*

In order to calculate whether or not there were significant differences in the distribution of turns between the students, several descriptive statistic tests were performed. Descriptive statistics for turn-taking by activity are summarized in Table 5.4 and statistics for turn-taking by teams 1 and 2 are illustrated in Table 5.5. For more details, see appendices F, G, H, I and J.

Table 5.4
Descriptive statistics for turn-taking by activity

	Turn-taking						
	*N	Mean	Median	Std	Sum	Min	Max
Activities							
Heads Together	16	59	55	23	949	23	106
Jigsaw	24	52	38	31	1250	21	116
Roundrobin/ Roundtable	24	63	65	21	1502	25	108

*NB N = number of students (4) per number of activities (2 for Heads Together, 3 for Jigsaw and Roundrobin/Roundtable).

Table 5.5
Descriptive statistics for turn-taking by teams 1 and 2

		Turn-taking						
		N	Mean	Median	Std	Sum	Min	Max
Teams	Activities							
Team 1	Heads Together	8	49	46	20	392	23	86
	Jigsaw	12	46	35	27	553	23	105
	Roundrobin/ Roundtable	12	54	55	19	643	25	91
Team 2	Heads Together	8	70	65	22	557	47	106
	Jigsaw	12	58	47	34	697	21	116
	Roundrobin/ Roundtable	12	72	70	20	859	43	108

As shown in Table 5.6, an Anova test was also performed in order to determine if there were any significant differences in the way the two teams performed. The test revealed that there was no activity effect and that no significant differences were observed in terms of performance. In other words, the results suggest that students at different proficiency levels were performing in a similar manner in terms of turn-taking. However, it is important to remember that no proficiency test had been performed by the researcher and that the level of proficiency was based on the teacher's opinion and observations. On the other hand, the results of the Anova test indicated that Team 2 took significantly more turns than Team 1 ($p < 0.01$) which indicates that there was a group effect.

Table 5.6
Anova of turn-taking for teams 1 and 2

Source	DF	TYPE III SS	Means Square	F Value	Pr > F
Team	1	4393.526786	4393.526786	7.19	1.0106
Student (Team)	6	7268.827381	1271.471230	2.08	0.0771
Activity	2	1370.005208	685.002604	1.12	0.3359
Team*Activity	2	202.921875	101.460938	0.17	0.8476
Student*Activity (Team)	12	3446.281250	287.190104	0.47	0.9205

5.4 Research Question 4: *While performing cooperative learning activities, do the students provide each other scaffolding, and if so, what types are provided?*

The analysis of the transcripts and the video tapes revealed that the students used nine different types of scaffolding strategies and used them on 204 occasions when engaged in cooperative learning tasks. Each strategy was classified as either successful or unsuccessful and uptake was categorized as appropriate or inappropriate (see Table 5.7). As mentioned in Chapter 4, the data were also coded by an independent rater to check validity.

Table 5.7
Scaffolding strategies used by the students

Coding of Strategies	Team 1: Types of Strategies	# Used	Successful	Unsuccessful	Appropriate Uptake	Inappropriate Uptake
S1	Request for Assistance	7 (60.9%)	40 (60%)	27 (40%)	20 (29.8%)	0
S2	Comprehension Check	0	0	0	0	0
S3	Co-Construction	4 (3.6%)	2 (50%)	2 (50%)	1 (25%)	0
S4	Confirmation Check	9 (8.2%)	9 (100%)	0	1 (11.1%)	0
S5	Continuer	1 (0.9%)	1 (100%)	0	1 (100%)	0
S6	Instructing	3 (2.7%)	3 (100%)	0	2 (66.6%)	0
S7	Marking of Critical Features	0	0	0	0	0
S8	Other-Correction	22 (20%)	22 (100%)	0	12 (54.5%)	0
S9	Use of Resource	5 (4.5%)	4 (80%)	1 (20%)	2 (40%)	0
	Total :	110 (100%)	80 (73%)	30 (27%)	38% (35%)	0 (0%)
Coding of Strategies	Team 2: Types of Strategies	# Used	Successful	Unsuccessful	Appropriate Uptake	Inappropriate Uptake
S1	Request for Assistance	44 (46.8%)	30 (68%)	14 (32%)	12 (27.2%)	0
S2	Comprehension Check	0	0	0	0	0
S3	Co-Construction	2 (2.1%)	2 (100%)	0	1 (50%)	0
S4	Confirmation Check	9 (9.6%)	5 (56%)	4 (44%)	1 (11.1%)	2 (22.2%)
S5	Continuer	0	0	0	0	0
S6	Instructing	8 (8.5%)	6 (75%)	2 (25%)	2 (25%)	1 (12.5%)
S7	Marking of Critical Features	0	0	0	0	0
S8	Other-Correction	26 (27.7%)	22 (85%)	4 (15%)	8 (30.7%)	1 (3.8%)
S9	Use of Resource	5 (5.3%)	3 (60%)	2 (40%)	0	0
	Total:	94 (100%)	68 (72%)	26 (28%)	24 (25.5%)	4 (4.3%)
Total: (Team 1-2)		204 (100%)	148 (73%)	56 (27%)	62 (30%)	4 (0.01%)

As indicated in Table 5.7, a total of 204 strategies were used by the students during the cooperative learning activities. Of these instances, 73% were used successfully and 30% of the corrective feedback was used appropriately. In other words, less than 1% of the feedback that contained errors was reinvested by the students.

Interestingly, evidence of uptake was found not only for the person who requested assistance but also for other members of the team which suggests that the students were attentive and sensitive to the help provided by their peers.

Scaffolding strategies provided by qualified tutors (i.e., the teacher, student-teacher or researcher) were calculated separately as shown in Table 5.8. The analysis revealed that only 6% of the strategies were used by qualified tutors. This indicates that the assistance was mainly provided by the students. Also, the data analysis revealed that Comprehension Check and Marking of Critical Features were used only by the qualified tutors. These types of assistance correspond to typical strategies used by teachers in order to either verify a specific term or knowledge or to emphasize notions in order to elicit an answer.

Table 5.8
Scaffolding strategies used by qualified tutors (teacher, student-teacher, researcher)

Types of Strategies	# Used	Successful	Unsuccessful	Appropriate Uptake	Inappropriate Uptake
Request for Assistance	0	0	0	0	0
Comprehension Check	2 (15%)	2 (100%)	0	0	0
Co-Construction	0	0	0	0	0
Confirmation Check	0	0	0	0	0
Continuer	0	0	0	0	0
Instructing	1 (0.8)	1 (100%)	0	1 (100%)	0
Marking of Critical Features	6 (46%)	6 (100%)	0	2 (33.3%)	0
Other-Correction	3 (23%)	3 (100%)	0	3 (100%)	0
Use of Resource	1 (0.8%)	1 (100%)	0	0	0
Total Tutors:	13 (6%)	13 (100%)	0 (0.0%)	6 (46%)	0 (0.0%)
Total Students:	204 (94%)	148 (73%)	56 (27%)	62 (30%)	4 (0.01%)
Total tutors & students:	217 (100%)	161 (74%)	56 (26%)	68 (31%)	4 (1.8%)

In order to calculate whether or not there were significant differences in strategies used by the two Teams, a Chi-Square analysis was performed. Descriptive statistics for seven out of nine strategies are provided in Table 5.9. Due to the low number of times strategies 2 (Comprehension Check) and 7 (Marking of Critical Features) were used while performing the cooperative learning activities, these latter were not considered in the Chi-Square test. The descriptive statistics for a Chi-Square analysis (Table 5.9) revealed that there were no significant differences with respect to the use of strategies by the two different Teams.

Table 5.9
Descriptive statistics for use of strategies by team (7 Strategies)

Frequency Col Pct	Team 1	Team 2	Total
S1	67 59.82%	44 46.81%	111
S3	4 3.57%	2 2.13%	6
S4	9 8.04%	9 9.57%	18
S5	2 1.79%	0 0.00%	2
S6	3 2.68%	8 8.51%	11
S8	22 19.64%	26 27.66%	48
S9	5 4.46%	5 5.32%	10
Total	112	94	206

Since strategies 3 (Co-construction) and 5 (Continuer) were used only on rare occasions and in order to further determine if there were any significant differences, Strategies 3 and Strategies 5 were also removed from the test (see Table 5.10). As indicated in Table 5.11, the result of the Chi-Square test is greater than .05 or 5%, which means that there is no significant difference. This indicates that the distribution of the strategies used in Team 1 is not significantly different than the distribution in Team 2.

Table 5.10
Descriptive statistics for use of strategies by team (5 Strategies)

Frequency Col Pct	Team 1	Team 2	Total
S1	67 63.21%	44 47.83%	111
S4	9 8.49%	9 9.78%	18
S6	3 2.83%	8 8.70%	11
S8	22 20.75%	26 28.26%	48
S9	5 4.72%	5 5.43%	10
Total	106	92	198

Table 5.11
Statistics for Tables 5.9 and 5.10

Statistics	DF	Value	Prob
Chi-Square	4	6.4140	0.1703
Likelihood Ratio Chi-Square	4	6.5017	0.1647
Mantel-Haenszel Chi-Square	1	3.5739	0.0587
Phi Coefficient		0.1800	
Contingency Coefficient		0.1771	
Cramer's V		0.1800	

In order to see if there were any significant differences in the types of successful and unsuccessful strategies used by the students taken all together, an additional Chi-Square test was run for the 5 most frequently used strategies with the combined results for the two teams (see Table 5.12).

Table 5.12
Descriptive statistics for use of strategies

Frequency Row Pct	Successful	Unsuccessful	Total
S1	70 60.06%	41 36.94%	111
S4	14 77.78%	4 22.22%	18
S6	9 81.82%	8 18.18%	11
S8	44 91.67%	4 8.33%	48
S9	7 70.00%	3 30.00%	10
Total	144	54	198

Table 5.13
Chi-square for use of strategies

Statistics	DF	Value	Prob
Chi-Square	4	14.6346	0.0055
Likelihood Ratio Chi-Square	4	16.5697	0.0023
Mantel-Haenszel Chi-Square	1	10.5973	0.0011
Phi Coefficient		0.2719	
Contingency Coefficient		0.2623	
Cramer's V		0.2719	

As shown in Table 5.13, the Chi-Square test, also confirmed by the Fisher's Exact Test, is inferior to .05 or 5%, which means that some types of strategies were used significantly more frequently than others. In order to see which strategies were more

frequently used, all strategies were compared two by two. As indicated in Table 5.14, significant differences were found for strategies 1 (request for assistance) and 8 (other-correction). Although both strategy 1 and strategy 8 were the most frequently used strategies, strategy 1 differed significantly in terms of frequency compared to strategy 8. In other words, request for assistance was used twice as frequently as other-correction.

Table 5.14
Chi-square test for comparison of strategies 1 and 8

Statistics	DF	Value	Prob
Chi-Square	1	13.5109	0.0002
Likelihood Ratio Chi-Square	1	15.7090	<.0001
Continuity Adj. Chi-Square	1	12.1381	0.0005
Mantel-Haenszel Chi-Square	1	13.4260	0.0002
Phi Coefficient		-0.2915	
Contingency Coefficient		0.2799	
Cramer's V		-0.2915	

As presented below (Tables 5.15 and 5.16), a Chi Square test revealed that there is a significant difference in the number of scaffolding strategies used per type of activity for combined Teams 1 and 2. More specifically, the results show that for the Roundrobin/Roundtable task type the number of scaffolding strategies was more than twice as high for the Jigsaw task and almost twice as high for the Heads Together task.

Table 5.15
Number of scaffolding strategies per task type for combined Teams 1 and 2

Activity	Frequency	Percentage scaffolding strategies per task type	Test Percent	Cumulative Frequency	Cumulative Percent
Heads Together (2)*	56	25.81%	33.00%	50	25.81%
Jigsaw (3)*	50	23.04%	33.00%	106	48.85%
Roundrobin/ Roundtable (3)*	111	51.15%	33.00%	217	100.00

Note. (X)*: Represents the number of tasks for each type of CL activity

Table 5.16
Chi-Square Test for Specific Proportions

Chi-Square	31.5911
DF	2
PR > ChiSq	< .0001

Sample size = 217

5.5 Summary

The present chapter presented the findings related to the four research questions. The next chapter compares the findings with the most relevant studies discussed in the literature review pertaining to the investigation of negotiation of language while performing group work.

Chapter 6: Discussion and Conclusion

6 Introduction

The main purpose of the present research study was to contribute to classroom-based research on oral interaction by exploring how elementary students in an intensive ESL program collaborated to carry out specific types of cooperative learning tasks. More precisely, the objective was to identify if, while performing CL activities, each student of the team took turns in the conversation in an equal manner and did so using the target language, and, if students provided assistance to each other, the types of scaffolding provided.

The previous chapter presented the results of the four research questions. Chapter 6 is divided into three main sections. Section 6.1 focuses on three main areas of discussion: Issues related to language learning, methodological issues, and implications for ESL pedagogy. Section 6.2 briefly sums up the main findings of the study. Section 6.3 examines the limitations and suggests possible directions for future research.

6.1 Areas of Discussion

In the section below, three main topics will be discussed: issues related to language learning, issues related to the methodology used in the present research study and finally the implications for ESL pedagogy

6.1.1 Issues Related to Language Learning

Three main issues related to language learning were identified and will be discussed in this section. The first issue focuses on tasks and turn-taking, the second one deals with the use of French and English, and the third one discusses issues related to scaffolding.

One main issue related to language learning and discussed in this study refers to tasks and turn-taking. As in Mattar and Blondin's (2006) study, the results revealed that each student took a substantive number of turns and was actively involved in each one of the eight cooperative learning activities. As mentioned in Chapter 4, the tasks, which drew on principles of cooperative learning, were specifically designed to ensure positive interdependency, especially as pertains to the sharing of resources and the assignment of

roles. As a result, each student was encouraged to take turns in the conversation on a regular basis. Moreover, unlike certain studies which have investigated interaction in group work, the findings indicated that stronger students did not dominate the conversations at any time (Mattar & Blondin, 2006) and that weaker students participated as much as the others, sometimes even more than the average students.

In the present study, three different CL task types, rather than only one as in Mattar and Blondin, were used to investigate turns taken. Although all tasks generated a substantial number of turns, of the three different types, the most productive was Roundrobin/Roundtable with an average of 500 (39%) turns per activity. It was closely followed by Heads Together with an average of 474 (35%) turns and finally Jigsaw with an average 416 (26%) turns per activity.

One reason which could possibly explain the discrepancy between the three tasks could be related to the fact that, in addition to speaking, the Roundrobin/Roundtable also required the students to write complete sentences. Therefore, more negotiation related to vocabulary words, sentence structure and appropriate grammar was needed in order to reach a consensus. As in the Roundrobin/Roundtable task, the Jigsaw also required some writing from the students; however, since only simple words were needed, the students did not have to negotiate a lot of language and was seemingly less efficient in terms of generating occasions for turn-taking. Finally, although the Heads Together generated a high number of turns, it was strictly an oral task which resulted mainly in the identification and description of what was illustrated on the posters.

The second issue related to language learning pertain to the use of French and English in class. As discussed in the previous chapter, French was rarely used while communicating with others. In fact the results indicated that 91.4% of the turns were entirely produced in English. This appears to be due to the fact that the teacher addressed the students only in the target language and was very strict regarding the use of English in the classroom. As mentioned in Chapter 4, the students were only allowed to use the L1 for the following two purposes: to code switch using “How do you say X in English”, or when permission was requested, to use a “Time Out”. Indeed, the analysis of the transcripts revealed that on three different occasions, despite the request for a Time Out, the partners continued to express themselves only in the L2. This suggests that the

students were making a great effort to keep the conversation going in English. What was also particularly striking was the prevalence of the strategy, request for assistance, which was used an average of 54% of the time and frequently involved the formula students had been taught in class – “How do you say X in English?”

In Mattar and Blondin’s (2006) study, two groups were observed with two different teachers and two different pedagogical approaches. One group was learning German and students were free to express themselves either in French, the students’ mother tongue, or in German, the L2. The teacher of this group regularly used both languages in class and most of the instructions were translated into the students’ L1. The students from the other class were learning Dutch. The Dutch teacher only spoke in the L2 and students were penalized when using the L1 in class. The findings revealed that turns taken in the L2 were significantly higher in the class where the L2 was mandatory at all times. As in this latter classroom, the present study suggests that the use of a rule in regard to the use of the target language can be important in terms of encouraging students to make an effort to speak the second language. The present study also underscores the importance of introducing strategies to avoid the use of French, in particular the formula, “How do you say X in (target language)?”

The final issue related to language learning discussed in the present research study concerns scaffolding. The first one related to scaffolding pertains to other-correction. Based on a study involving adult learners in a Japanese university setting, Aline and Hosada (2009) suggest that other-correction is more generally a characteristic of low level learners. According to them, groups of upper-intermediate level learners will tend to adopt native speaker strategies, meaning that they will rarely provide linguistic support or correct others since it is considered as face-threatening and is normally not accepted in society. On the other hand, a study conducted by Marinette (1996) suggests that the proficiency level of the student is not the crucial factor in terms of the level of assistance provided by the peers. Drawing on sociocultural theory, Marinette emphasizes that what is important is how the learner is orienting to task. If the purpose of the activity is oriented toward language acquisition, there will be scaffolding. She observes that: “la conscience linguistique peut être orientée vers une conception lexicopragmatique ou morphosyntaxique de la langue cible et elle se verbalise dans les activités de focalisation

et d'extraction de données réalisées par l'apprenant" (p. 157). Although the students in the present study were at a low level of proficiency, the remark by Mariette is also of relevance.

When interviewed, the teacher in the present study mentioned that group work was crucial in order to first, encourage all students to help each other linguistically and secondly, to encourage them to draw on their personal strengths in order to contribute to the task. As a teacher who wished to encourage her students to become more autonomous in their learning, she considered that it was "good for the students to be able to rely on someone else and to be assisted in performing a task" and that cooperation "often leads to a rewarding completion of a task for all students involved". Therefore, although focus on form was not necessarily a requirement for all tasks completed by students in this class, they were generally encouraged to assist each other. As suggested by the results of the present study, the data provided ample evidence of instances where students spontaneously and voluntarily scaffolded each other. In other words, the orientation of the students appeared to be not only to complete a task but also to use the task in order to practice the L2 and to develop new linguistic knowledge.

For learners who are participating in a task with this perspective, linguistic corrections and the co-construction of ideas appear to be more readily accepted by the group. More generally, the present study lends additional support to those classroom-based studies which have demonstrated that students can scaffold each other linguistically in tasks involving pair and group work (Donato, 1994; Foster & Ohta, 2006; Storch, 2001; Swain & Lapkin, 1998, 2000, 2002; Villamil & De Guerrero, 1996). Of note, however, is that it extends this literature by providing evidence that not only adults, but also younger children in elementary school possess this capacity.

Also of note is that as in Foster and Ohta's (2006) study, the analysis of scaffolding strategies revealed that the strategies strictly associated with the interactionist perspective such as confirmation checks and comprehension checks were rarely used. More precisely, in the present study, confirmation checks were used only 9% of the time and comprehension checks were not at all used by the students. In other words, as suggested by Foster and Ohta (2006), the analysis revealed students' preference for those

strategies more related to assisted learning, in particular request for assistance and other- correction, which, respectively, accounted for 54% and 24% of total strategy use.

6.1.2 Methodological Issues

Unlike past research studies where only the voice was recorded, the video-recordings ended up being a crucial tool in order to, first, document gestures and non-verbal types of scaffolding and, second, to witness the use of several external resources used to solve linguistic problems.

The use of video-recordings also allowed the researcher to observe that the students responded very positively to the cooperative learning structures and tasks. In fact, the students appeared to be motivated and to enjoy working together while performing cooperative group activities. They were seriously involved at all times in each one of the eight activities and participated with interest in each task. Furthermore, the analysis of the tapes revealed no frictions between team members; no student appeared to be isolated from the group, and frequent smiles and laughter were observed. Also, the analysis of the transcripts revealed several instances where students clearly demonstrated their knowledge and capacity to socially interact in a polite and appropriate manner.

6.1.3 Implications for ESL Pedagogy

The observations and findings of this study represent interesting contributions to ESL pedagogy for two main reasons.

First, since little research has been conducted on cooperative learning in elementary classrooms, this study helps to fill the gap in this specific area. As mentioned in the literature review, numerous studies have investigated oral interaction from an interactionist perspective but most of them aimed to observe pair work in laboratory settings (Foster, 1998; Gass, Mackey & Ross-Feldman, 2005; Naughton, 2006; Pica, 1994; Smith, 2003;) and most of them were carried out on adults (Buckwalter, 2001; Foster and Skehan, 1999; Skehan and Foster, 1999; Storch, 2007). The present research, therefore, contributes to pedagogy since it provides evidence that children learning a second language and performing classroom cooperative learning group activities

voluntarily co-construct their knowledge with the help of others. In other words, this study confirms the fact that elementary students are able and willing to provide support to their peers and receive assistance from their teammates while performing group tasks.

The second important contribution to L2 pedagogy is that Grade 6 elementary students are able to perform cooperative learning activities without referring to the L1 on a regular basis. This study confirms that cooperative tasks provide abundant opportunities to use the target language and ensure fairly equal participation by all students in the team as evidenced by statistics pertaining to turn-taking and word counts. It also suggests that the use of a rule for using the target language and strategies for asking for language items help maximize the use of the target language while performing the activities.

6.2 Summary of the Findings

The findings in the present research study result from the investigation of the data gathered from two heterogeneous groups of four Grade 6 elementary students performing eight cooperative learning tasks. The results revealed that each student took turns in the conversations in an equal manner and were actively involved in each one of the eight cooperative learning activities. Out of the 3 701 turns produced by the students, 91.4% were entirely produced in English. This indicates that the use of cooperative tasks provided abundant opportunities to use the target language and ensured an equal participation of all students in the team.

A total of 204 episodes of scaffolding used by the students were identified involving nine different strategies. In other words, the results revealed that students in both teams were very receptive and proactive when noticing a linguistic gap, were able and willing to provide support and receive assistance from their teammates, and could benefit from the assistance provided.

In order to determine if there were any significant differences in the way the two teams performed during the activities, an Anova test was run. The test revealed that there was no activity effect and that students at different proficiency levels were performing in a similar manner in terms of turn-taking. However, the results of the Anova test indicated

that there was a group effect and that Team 2 took significantly more turns than Team 1 ($p < 0.01$).

Regarding the strategies used by the students, a Chi-Square test showed that the difference in use of the two most frequently used strategies, strategies 1 (request for assistance) and 8 (other-correction), was statistically significant. Finally, statistics also revealed that the number of scaffolding strategies used per type of activity for combined Teams was significantly different and that those for the Roundrobin/Roundtable task type were more than twice as high for the Jigsaw task and almost twice as high for the Heads Together task.

6.3 Limitations and Recommendations for Future Research

The present research study sought to observe two groups of four learners studying in the same classroom. Therefore, the findings have very limited applications since they are unique to this specific context. Future studies involving experimental designs and involving a larger number of students would be beneficial in order to ensure generalizability of the results. In addition, in future studies, students should be pre-tested by the researcher for proficiency level and not solely identified by the teacher as weak, average or high achievers as it was the case in the present study.

Also, since the L1 of all the students in the present study was the same, code switching was frequently used in requests for assistance. Investigations with groups of students with different mother tongues could be of interest to examine the strategies used to deal with such requests.

Since the present analysis was limited to linguistic-related scaffolding, task- and content-related episodes of assistance were not taken into consideration. Future studies investigating scaffolding could be extended to include such forms.

Finally, additional research is needed to explore whether the results obtained in the present study pertaining to the high use of the target language were due to the way the activities were designed, to the fact that the teacher was strict regarding the use of the target language in class, or to both. More attention also needs to be given to whether or not the use of other-correction is more characteristic of low level students as proposed by Aline and Hosada (2009) or whether, as suggested by sociocultural theory (Marinette,

1996) more related to the way students are orienting to the task. As suggested by the present study, in this latter case, the classroom culture, as reflected by the way in which the teacher may promote the use of the L1 (e.g., via a rule, strategies for asking for help in the L1) needs to be more carefully elucidated.

6.4 Final Remarks

To conclude, this chapter discussed the three main issues related to the findings in the present research, presented the conclusion, briefly examined the limitations of this study and provided recommendations for future research. In sum, the findings in this study contributed to my understanding, as a second language teacher, of the importance of using well designed group activities and helped me gain a deeper understanding of the dynamics that exists between learners when interacting with others in groups.

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APPENDIX A: Numbered Heads Together Type Activities

Following is the information sheet provided to the teacher along with a collection of twelve drawings used in the numbered heads together type activities. The drawings presented in class were colored and done on poster size cardboards.

Task Type: Numbered Heads Together

Information Sheet Given to the Teacher

Material needed : 4 Posters

General info :

- 1) Each team of 4 is given a number and each student per team is given a number from 1 to 4
- 2) The teacher asks a question related to a text or a drawing.
- 3) The students put their heads together in order to come up with the answer.
- 4) The teacher randomly calls a number and the student with that specific number answers the question.

Procedure and steps :

- The teacher, standing in front of the class, will show one of four poster size drawings.
- The teacher will then ask a question related to the drawing. A total of four or five questions per drawing will be asked such as : What do you see on the poster? Where does the action take place? What are the people doing? What are they wearing?
- The students will be given a few minutes to discuss in their team to find the answers. (Students must share ideas, include as many details as possible, and answer with complete sentences).
- The teacher will then randomly call a team number and a student letter, for example team 4, student B. Please, do not ask 1 specific student to answer.
- The student corresponding to the information will have to answer the question.

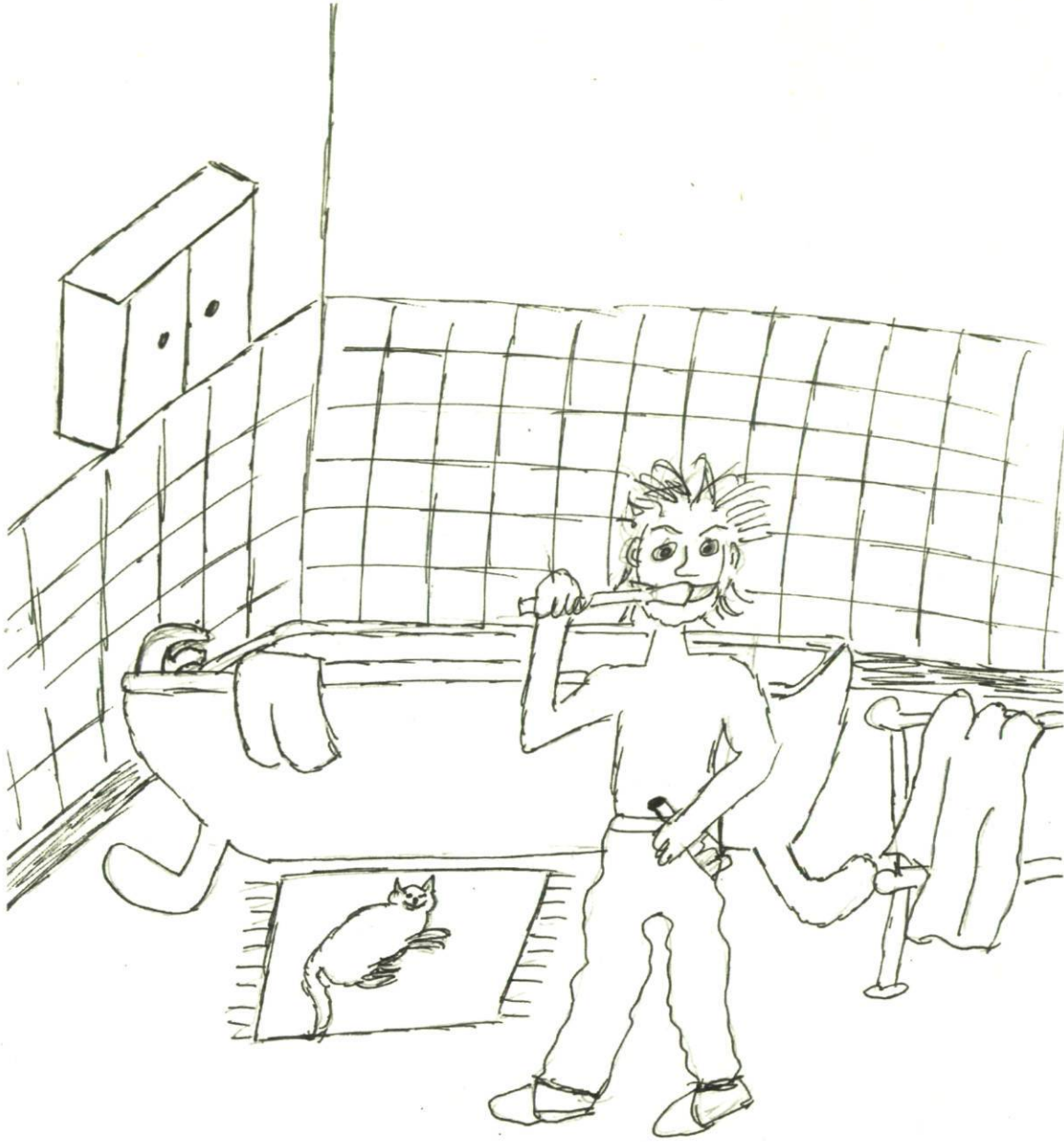


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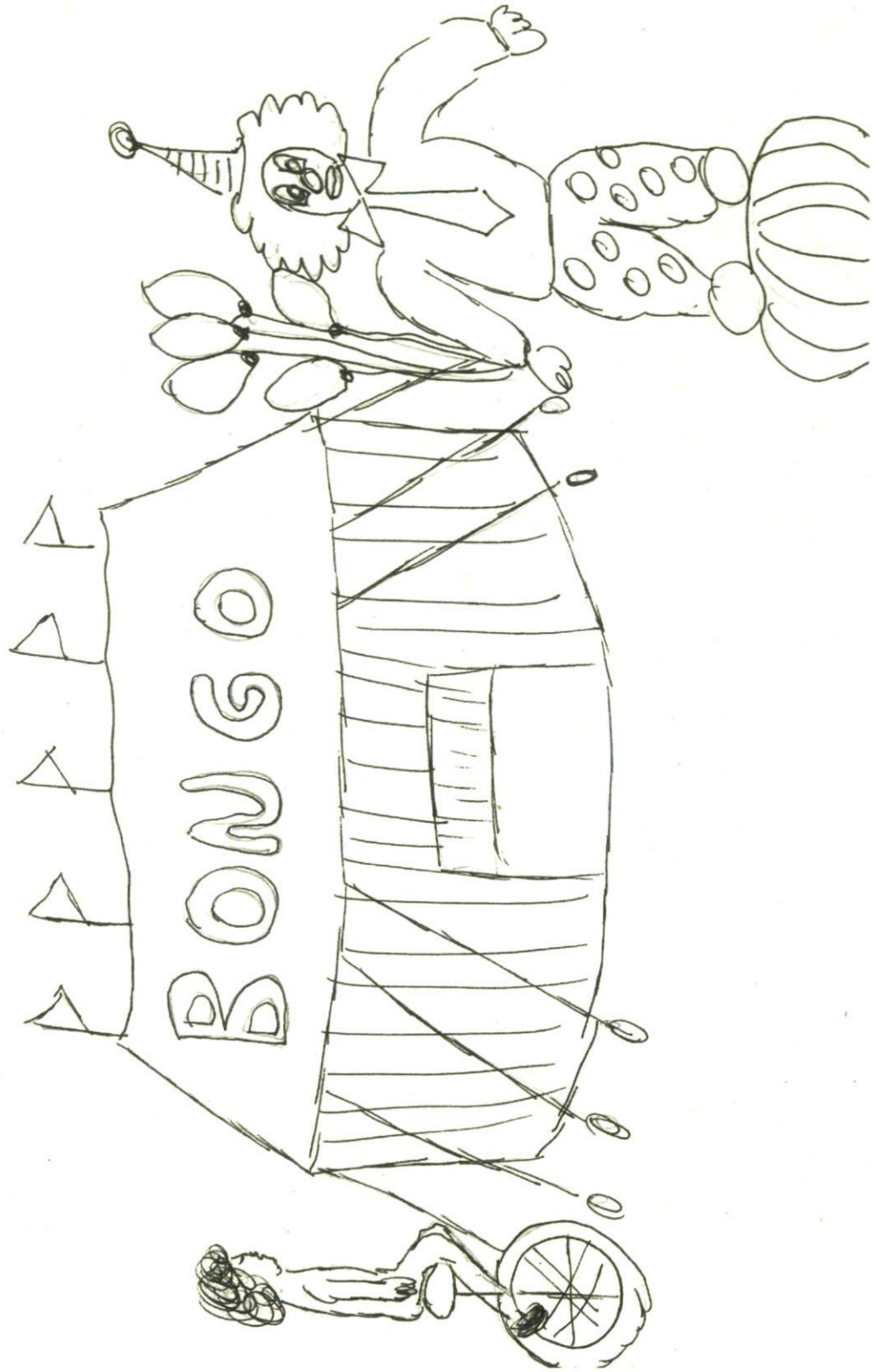






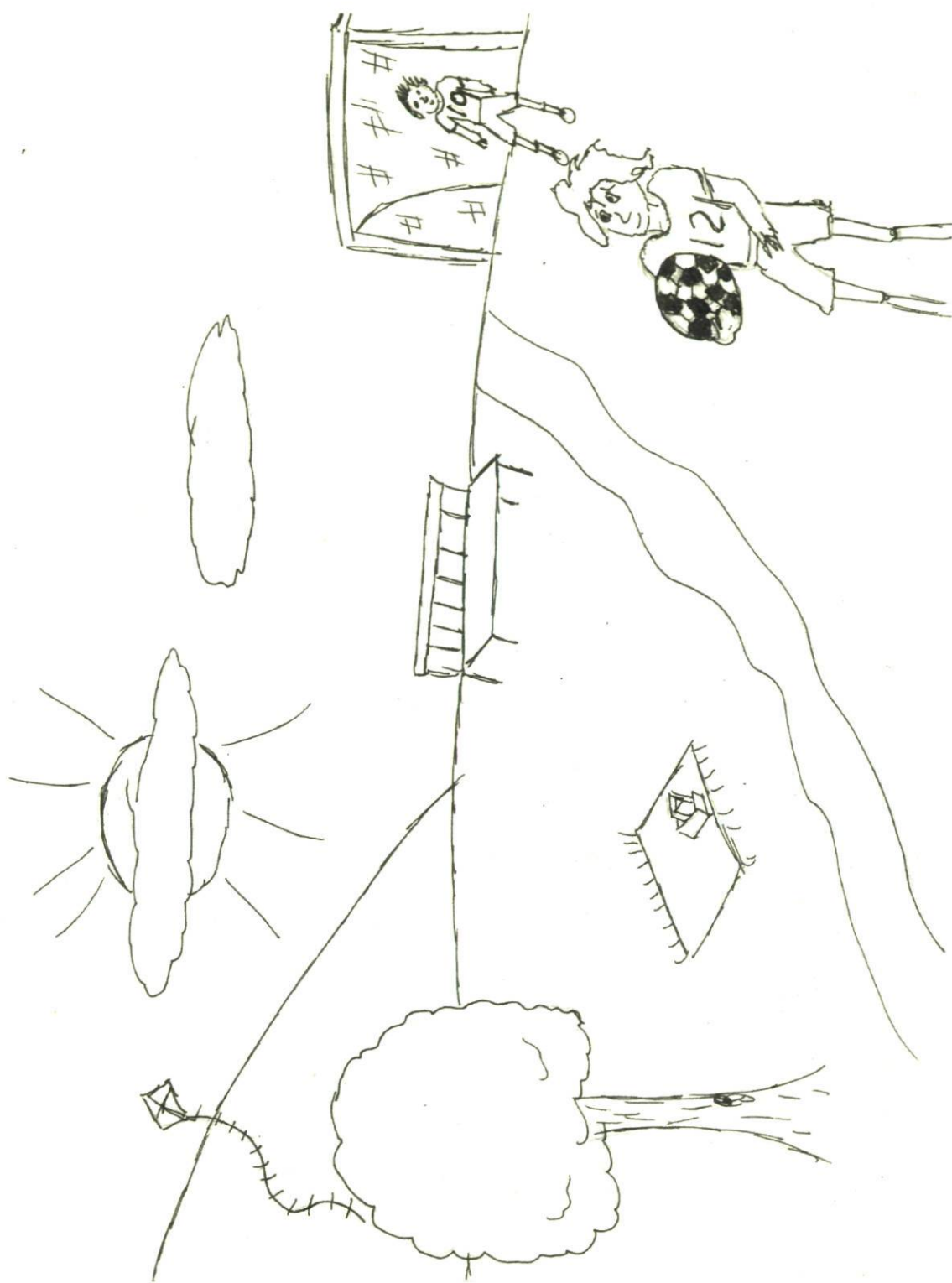


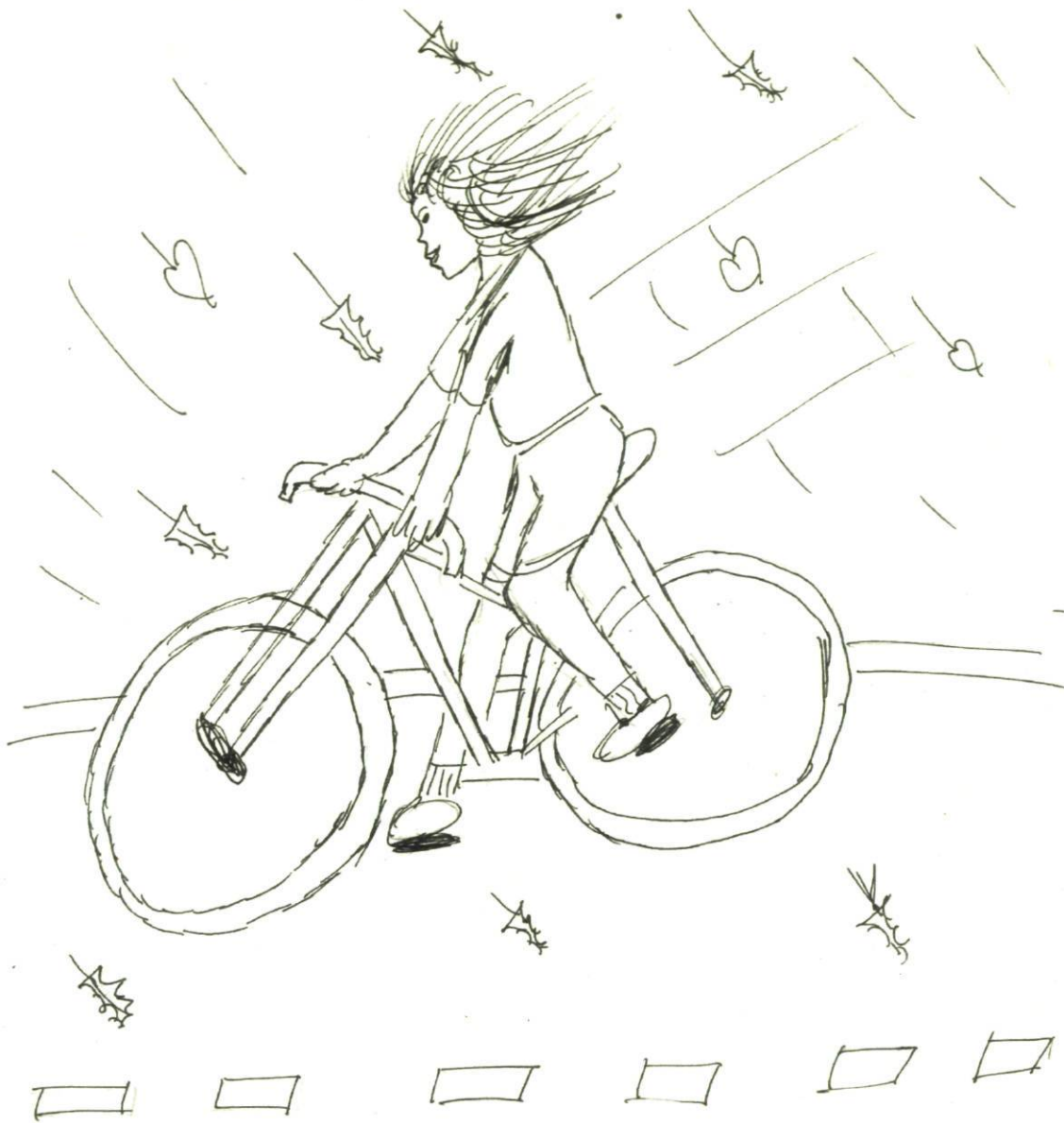












APPENDIX B: Jigsaw Type Activities

The following pages include the information sheet for the teacher, the answer sheet for the jigsaw activity, the information cards for each student and the correction grid for the teacher. The three jigsaw activities are in the order they were presented in class.

Task Type: Jigsaw

Information Sheet Given to the Teacher

Material needed : 1 answer sheet per team
1 envelop per team

General info

The students must not show their cards to their partners

Procedure and steps

- The teacher will distribute
 - 1 answer sheet per team
 - 1 envelope per team which will include four different cards entitled Student A, B, C and D. (Each card will reveal a different piece of information about the key words that have to be written down on the answer sheet.)
- Without looking at the cards of their partners, students, in turn, will be asked to read clue number 1 and interact orally so as to find the key word. (Then, they will continue with clue number two, and so on. Once all the key words are written down, the students will be able to discover the secret word or message)

Self-evaluation

- When the activity is over, the students will be asked, as a group, to answer the following two questions : Did every student speak English during the activity? Did every student participate equally in the task? To do so, the students will simply have to circle the smiley face corresponding to their performances on the task.
-

A Trip to Mount Sainte-Anne

What Am I ?

Team members : A) _____
 B) _____
 C) _____
 D) _____

Instructions : Write your answers in the correct boxes and find the secret word.

1) _____

2) _____

3) _____

4) _____

5) _____

6) _____

7) _____







8) _____

9) _____

10) _____

Secret Word : _ _ _ _ _ E _ _ _ N

Team Evaluation :

Everyone spoke English during the activity			
Everyone in the group participated equally			

A Trip to Mount Sainte-Anne

Student A	Student B
<ol style="list-style-type: none"> 1) I exist only in winter 2) I am dangerous 3) I am the first place you go to 4) I am big 5) I am a piece of equipment 6) I am a piece of clothing 7) I can be thick or thin 8) I am big 9) I can be very young 10) I am very popular 	<ol style="list-style-type: none"> 1) I am very windy 2) Sometimes, you don't see me 3) You often have to pay to use me 4) I am very useful 5) I protect you from the cold 6) I am long 7) You put me inside something 8) I am very popular 9) I can be very old 10) I am thin
Student C	Student D
<ol style="list-style-type: none"> 1) It's hard to see through me 2) I am very cold 3) I am black 4) People love me 5) I normally have bright colors 6) I can be thin or thick 7) I keep you warm 8) When you visit me, you can sit and relax 9) I need some pieces of equipment 10) I am used in winter 	<ol style="list-style-type: none"> 1) I am a synonym of blizzard 2) I am slippery 3) Cars like me 4) In winter, I am covered with snow 5) You wear me when you go skiing 6) I keep your neck warm 7) I come in pairs 8) You can get food here 9) I am warmly dressed 10) I look like a surfboard

A Trip to Mount Sainte-Anne

What Am I ?

Team members : A) _____
 B) _____
 C) _____
 D) _____

Instructions : Write your answers in the correct boxes and find the secret word.

1) S N O W S T O R M

2) I C E

3) P A R K I N G L O T

4) M O U N T A I N

5) S K I J A C K E T

6) S C A R F

7) S O C K S







8) C A F E T E R I A

9) S K I E R

10) S N O W B O A R D

Secret Word : W I N T E R S E A S O N

Team Evaluation :

Everyone spoke English during the activity			
Everyone in the group participated equally			

A Trip to the Supermarket

Student A	Student B
<ol style="list-style-type: none">1) I am good with vegetables2) I am long3) I am a dairy product4) We are very small and we start with the letter "O"5) I am long and thin6) I am long7) I am very popular8) I can be frozen or fresh9) I can be orange or white10) I am made out of cream	<ol style="list-style-type: none">1) I am pink when I am cooked2) I am very thin3) I am a healthy snack4) You can buy us in a jar5) I am good in sandwiches6) I grow up in tress7) I am round8) I have different flavours9) I am good with bread10) You can use me to cook
Student C	Student D
<ol style="list-style-type: none">1) I live in the ocean2) I am good with sauce3) I have different fruit flavours4) We are green an oval5) I come from a pig6) I am yellow7) I am good with ketchup8) You can buy me in cartons, cans, or bottles9) I can be a healthy snack10) I am greasy	<ol style="list-style-type: none">1) I am a fish2) I am a type of pasta3) I am made of sour milk4) We are preserved in vinegar5) I am very good at breakfast6) Monkeys adore me7) I can be cooked on a grill8) I am a healthy drink9) I am very good on pizza10) You can spread me on toasts

A Trip to the Supermarket

What Am I ?







Team members : A) _____
 B) _____
 C) _____
 D) _____

Instructions : Write your answers in the correct boxes and find the secret word.

1)	S	A	L	M	O	N					
2)	S	P	A	G	H	E	T	T	I		
			3) Y	O	G	U	R	T			
			4) O	L	I	V	E	S			
5)	B	A	C	O	N						
			6) B	A	N	A	N	A			
			7) H	A	M	B	U	R	G	E	R
			8) J	U	I	C	E				
9)	C	H	E	E	S	E					
10)	B	U	T	T	E	R					

Secret Word : M A Y O N N A I S E

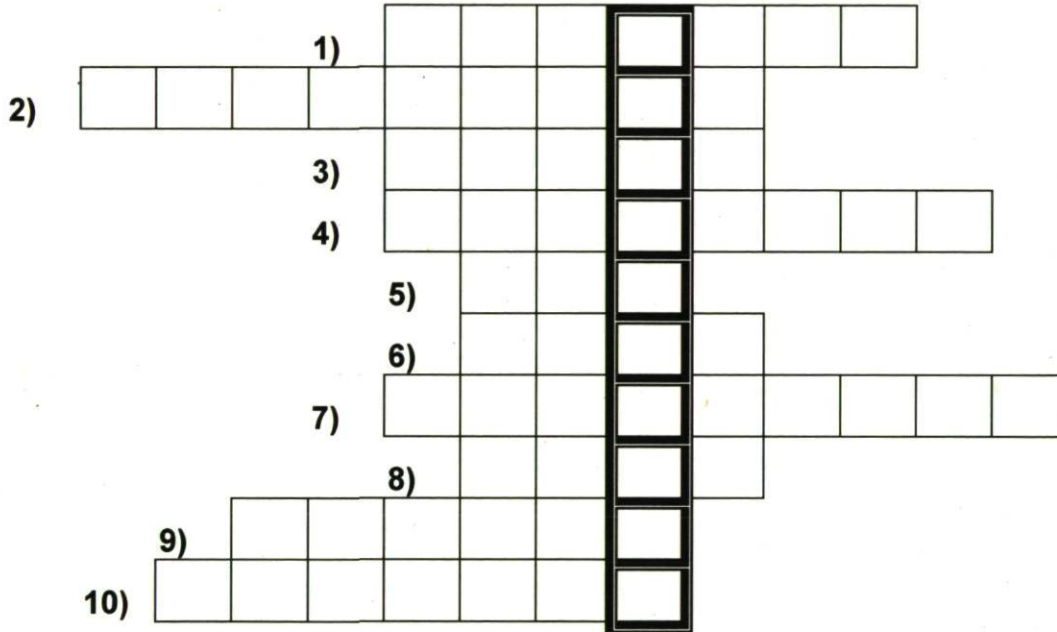
Team Evaluation :

Everyone spoke English during the activity			
Everyone in the group participated equally			

A Trip to the Zoo
What Am I ?

Team members : A) _____
 B) _____
 C) _____
 D) _____

Instructions : Write your answers in the correct boxes and find the secret word.



Secret Word : _ _ _ _ _

Team Evaluation :

Everyone spoke English during the activity			
Everyone in the group participated equally			

A Trip to the Zoo

Student A	Student B
<ol style="list-style-type: none">1) I eat leaves2) I have 4 legs3) I live in the ocean4) I am small5) I have a funny nose6) I am a big mammal7) I have beautiful colors8) I have cold blood9) People don't like me10) We can live one hundred years	<ol style="list-style-type: none">1) I have 4 legs2) I am a reptile3) I am a very big animal4) I can be grey, brown or black5) I have a funny tail6) I can be very dangerous7) I am a friendly insect8) I make a funny sound9) I don't fly10) We can be small or big
Student C	Student D
<ol style="list-style-type: none">1) I can run fast2) I am a good swimmer3) I can be white, grey or blue4) I have a beautiful tail5) I am good to eat6) I have brown , black or white fur7) I can fly8) I can jump very high9) I eat insects10) We are very slow	<ol style="list-style-type: none">1) I have a long neck2) I eat animals and people3) I am an animal in danger4) I love nuts5) I am pink6) I love honey7) Some people collect me8) I am green9) I have 8 legs10) We have a shell

A Trip to the Zoo
What Am I ?







Team members : A) _____
 B) _____
 C) _____
 D) _____

Instructions : Write your answers in the correct boxes and find the secret word.

				1)	G	I	R	A	F	F	E		
2)	C	R	O	C	O	D	I	L	E				
				3)	W	H	A	L	E				
				4)	S	Q	U	I	R	R	E	L	
				5)		P	I	G					
				6)		B	E	A	R				
				7)	B	U	T	T	E	R	F	L	Y
				8)		F	R	O	G				
			9)	S	P	I	D	R					
10)	T	U	R	T	L	E	S						

Secret Word : ALLIGATORS

Team Evaluation :

Everyone spoke English during the activity			
Everyone in the group participated equally			

APPENDIX C: Roundrobin/Roundtable Type Activities

The following section contains the information sheet provided to the teacher, along with three picture stories and the answer sheets which were used in the Roundrobin/Roundtable type activities. The stories are in the order presented in class.

Task Type: Roundrobin / Roundtable

Information Sheet Given to the Teacher

Material needed : 1 envelope per team (including eight cards numbered from 1 to 8)

A two-page answer sheet (on which they will have to describe a story)

General info

The cards in the envelop will be glued onto a colored piece of cardboard and each student will have a different color. For example, student A will receive pictures 1 and 5 corresponding to a red piece of cardboard, student B will receive pictures 2 and 6 corresponding to a blue piece of cardboard, and so on.

The answer sheet will be divided into three columns. A photocopy of each picture will appear in the first column, followed by a colored square which will identify a student different from the one telling the story who will serve as secretary, and finally, three lines to write part of the story corresponding to the picture that the team comes up with. The activity will be performed as follows:

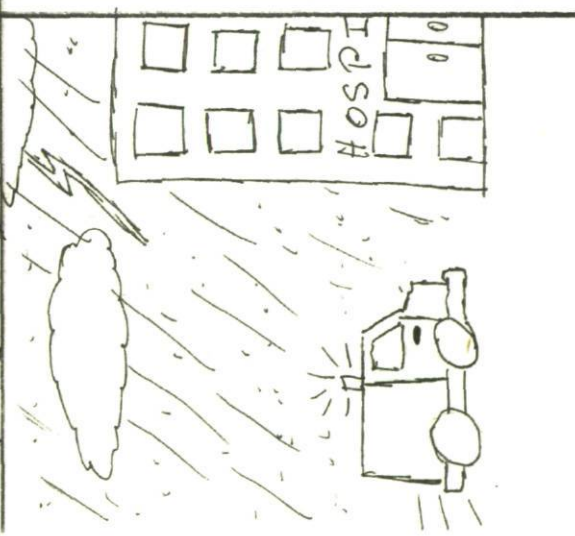
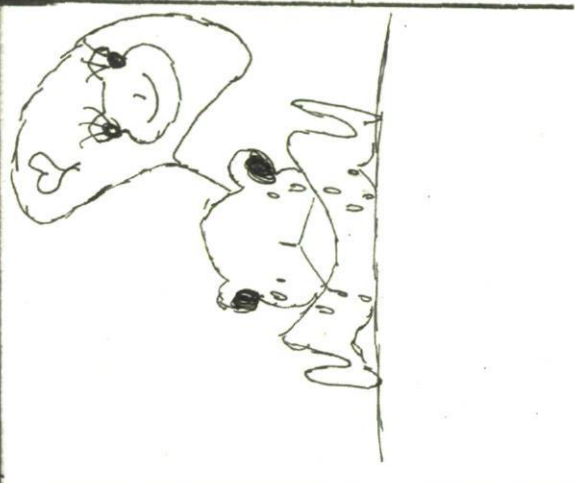
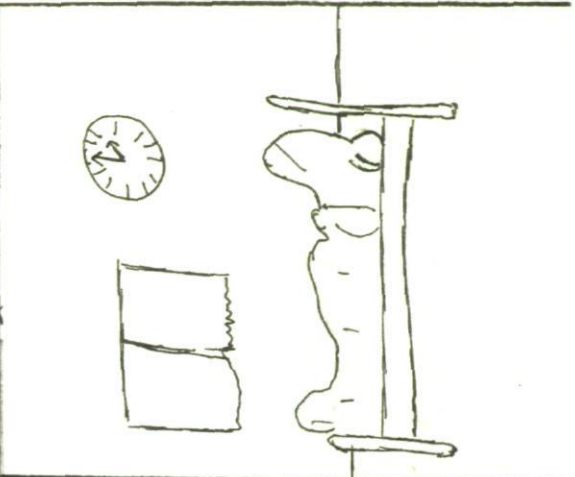
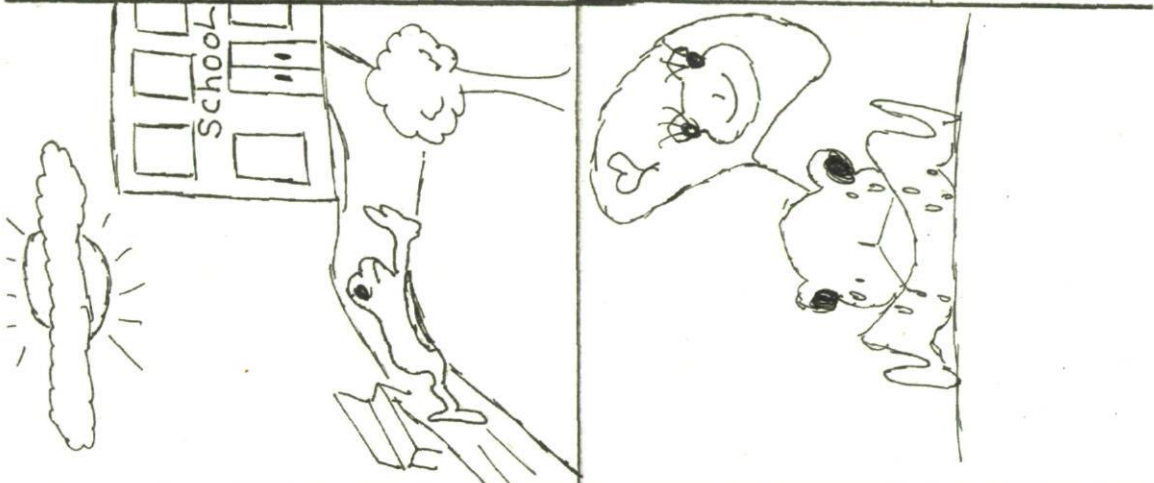
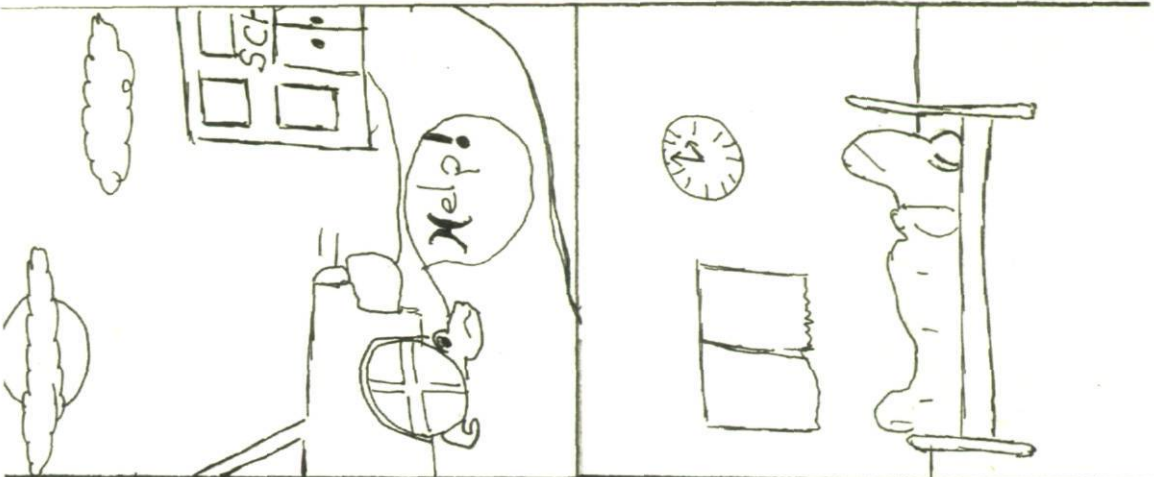
Procedure and steps

- The teacher will distribute
 - 1 envelop per team including the cards
 - 1 answer sheet per team
- Each student will hold their two cards in their hand.
- Student one will describe picture number one and will put it face up on the table. Then, all other team members will have the opportunity to add any additional details they wish. Finally, the student acting as secretary and who has the answer sheet will write down the story. (Although the main purpose of the activity is to interact orally, the fact that the students will have to agree on the description of the picture and write it down will probably generate more negotiation related to the meaning and form).

- In turn and one picture at a time, student A will place his/her drawing face up on the table and will describe the picture.
- All students will have to reach a consensus on what to write on the answer sheet. Then, student B will place his/her picture on the table and so on until a short paragraph has been written for each one of the eight pictures.

Self-evaluation





- Students will be asked to fill in the evaluation form regarding the group performance during the activity. The same format for the evaluation form as in the preceding activity will be found at the bottom of the answer sheet.


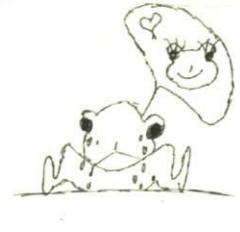
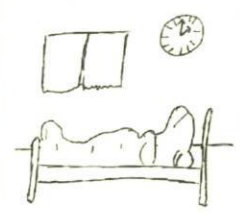











Activity 2

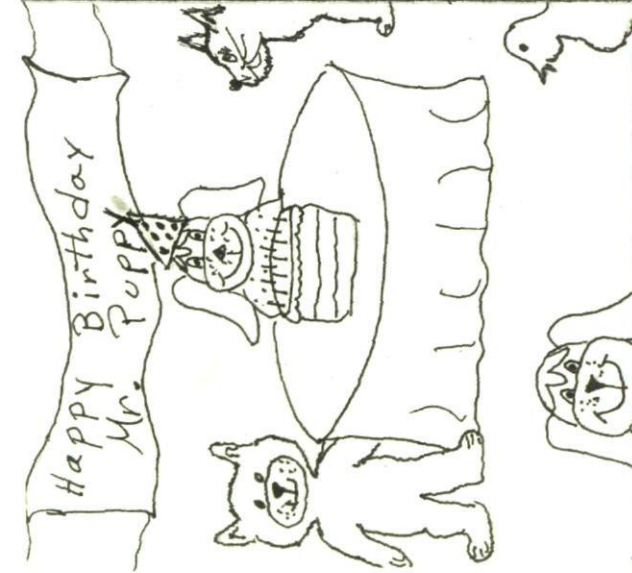
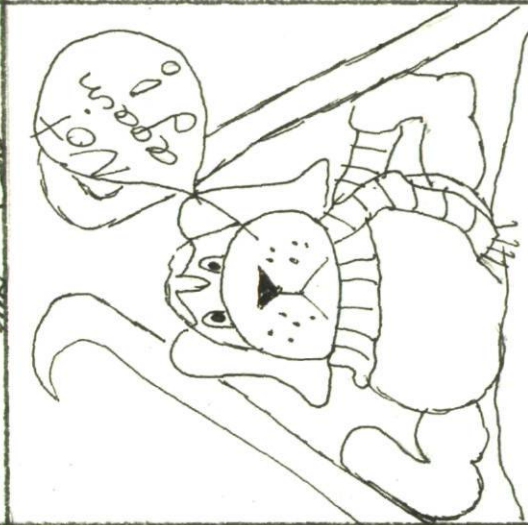
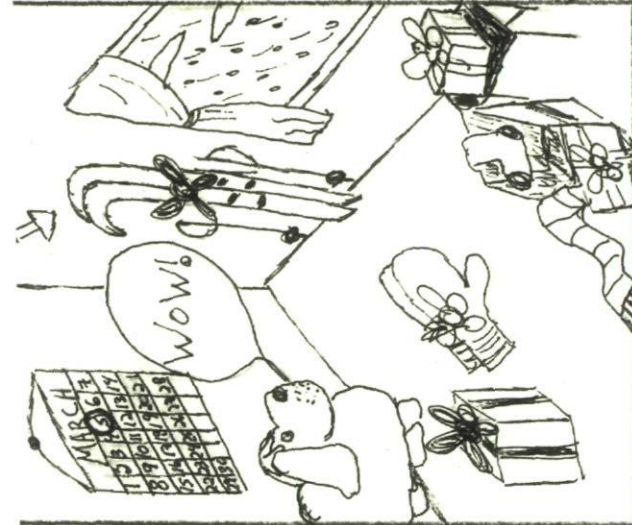
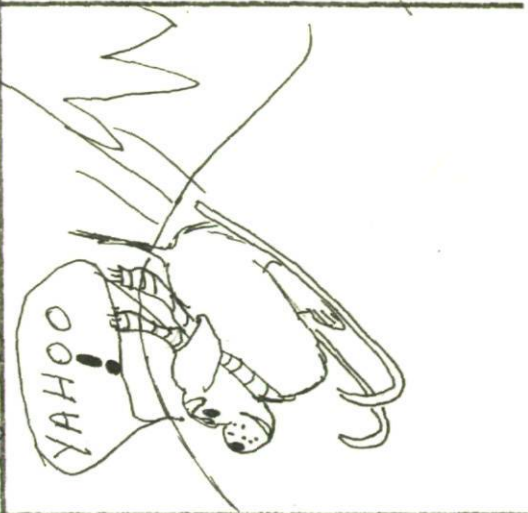
Names : _____

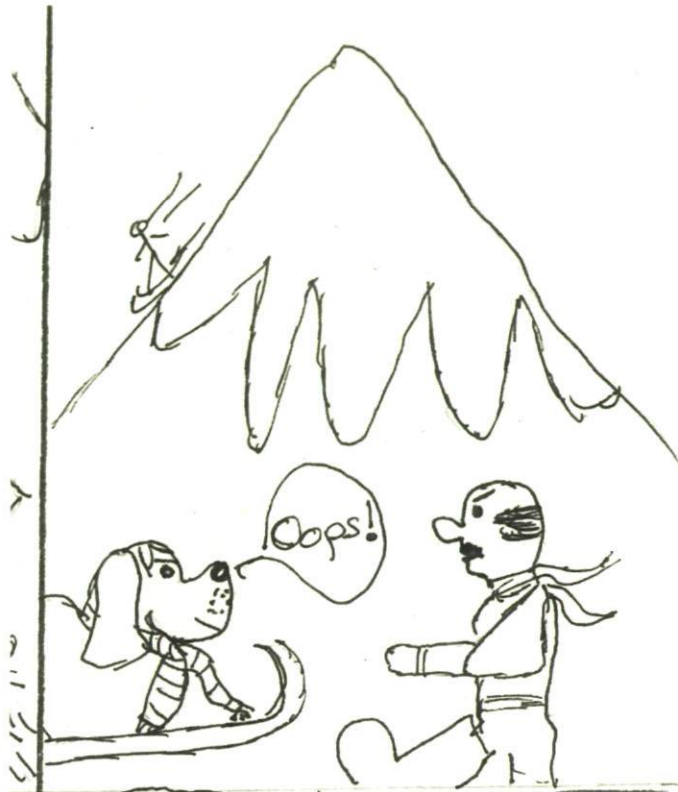
<p>1</p>  <p>Fred the Frog</p> <p>I'm late</p> <p>A drawing of a frog with a sad expression, looking at a clock. The text 'Fred the Frog' is written above him, and 'I'm late' is written in a speech bubble next to him.</p>	<input data-bbox="550 430 646 472" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>2</p>  <p>School</p> <p>A drawing of a school building with a tree in front and a sun in the sky. The word 'School' is written on the building.</p>	<input data-bbox="550 724 646 766" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>3</p>  <p>Help!</p> <p>A drawing of a car with a speech bubble saying 'Help!' and a building in the background.</p>	<input data-bbox="550 1018 646 1060" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>4</p>  <p>Save my FRIEND!</p> <p>A drawing of a cat in a car with a speech bubble saying 'Save my FRIEND!' and another car in the background.</p>	<input data-bbox="550 1323 646 1365" type="text"/> <hr/> <hr/> <hr/> <hr/>

<p>5</p> 	<input data-bbox="550 262 646 304" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>6</p> 	<input data-bbox="550 546 646 588" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>7</p> 	<input data-bbox="550 819 646 861" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>8</p> 	<input data-bbox="550 1123 646 1165" type="text"/> <hr/> <hr/> <hr/> <hr/>

Team Evaluation :





<p>Everyone spoke English during the activity</p>			
<p>Everyone in the group participated equally</p>			




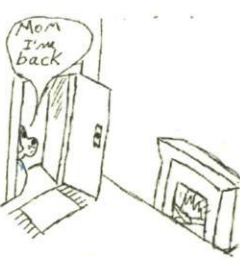










Activity 1

Names : _____

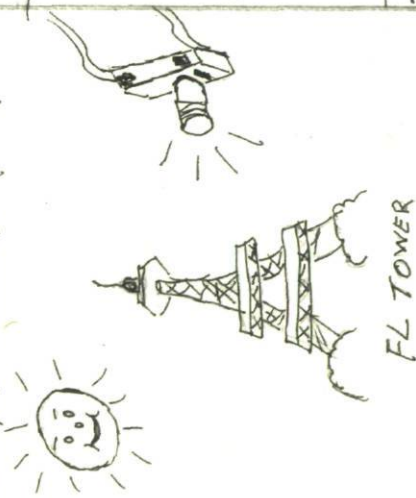
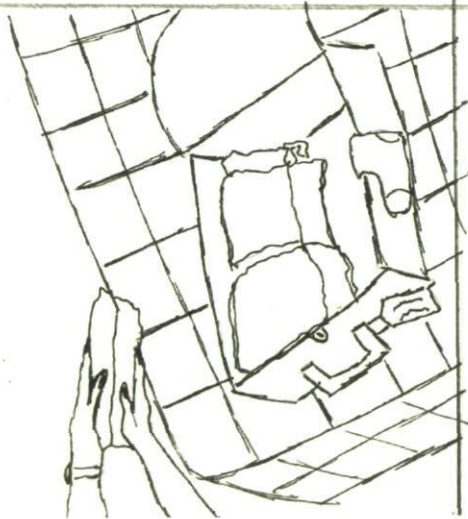
<p>1</p>  <p>Happy Birthday Mr. PUPPY</p>	<input type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>2</p>  <p>Wow!</p>	<input type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>3</p> 	<input type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>4</p>  <p>Oops!</p>	<input type="text"/> <hr/> <hr/> <hr/> <hr/>

<p>5</p> 	<input data-bbox="550 252 646 294" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>6</p> 	<input data-bbox="550 535 646 577" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>7</p> 	<input data-bbox="550 808 646 850" type="text"/> <hr/> <hr/> <hr/> <hr/>
<p>8</p> 	<input data-bbox="550 1123 646 1165" type="text"/> <hr/> <hr/> <hr/> <hr/>

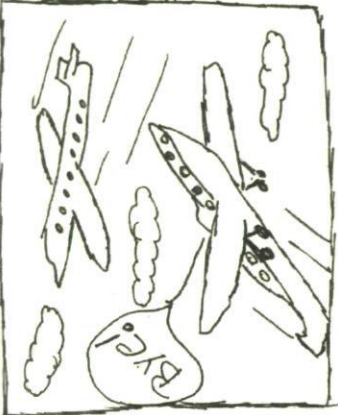
Team Evaluation :

<p>Everyone spoke English during the activity</p>			
<p>Everyone in the group participated equally</p>			

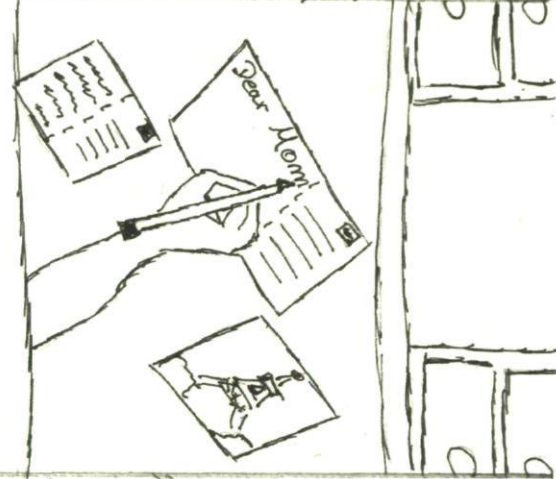
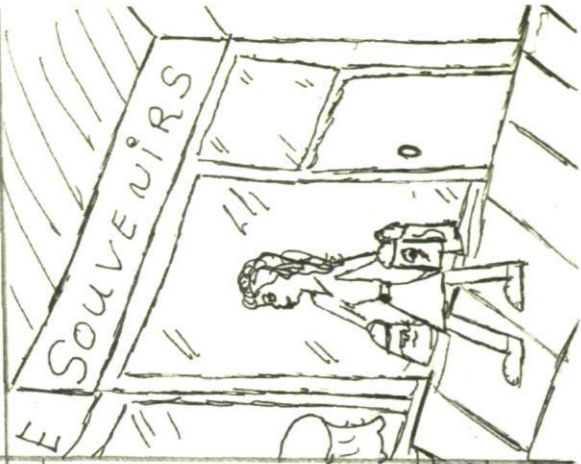
MELISSA'S TRIP
TO PARIS



QUEBEC INTERNATIONAL AIRPORT



Departure
9:30




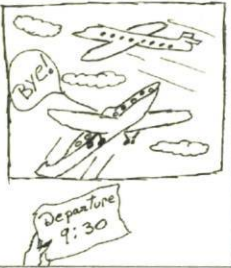




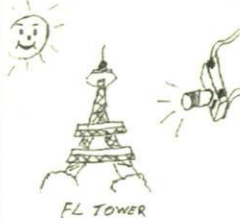
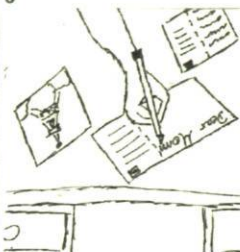


JUNE

1 SUN	2 Mon	3 Tue
P	A	R I S - 1
8 SUN	9 Mon	10 Tu
	Back home	
15 SUN	16 Mon	17 Tu







Activity 3

Names : _____

<p>1 MELISSA'S TRIP to PARIS</p> 	<input data-bbox="560 489 655 531" type="text"/> <hr/> <hr/> <hr/>
<p>2 Quebec INTERNATIONAL AIR</p> 	<input data-bbox="564 789 660 831" type="text"/> <hr/> <hr/> <hr/>
<p>3</p> 	<input data-bbox="564 1104 660 1146" type="text"/> <hr/> <hr/> <hr/>
<p>4</p> 	<input data-bbox="564 1413 660 1455" type="text"/> <hr/> <hr/> <hr/>

<p>5</p>  <p>EIFFEL TOWER</p>	<input type="text"/> <hr/> <hr/> <hr/>
<p>6</p> 	<input type="text"/> <hr/> <hr/> <hr/>
<p>7</p> 	<input type="text"/> <hr/> <hr/> <hr/>
<p>8</p> 	<input type="text"/> <hr/> <hr/> <hr/>

Team Evaluation :

<p>Everyone spoke English during the activity</p>			
<p>Everyone in the group participated equally</p>			

APPENDIX D: Interview with the English Teacher

A) Questions Asked at the Beginning of the Study

1) Biographical Information

- Tell me about your professional background and degrees
- What do you think is important to emphasize with learners in Grade 6 intensive in order to help them learn English.
- How do you characterize your approach to L2 learning with the student you are teaching?
- Do you consider that your teaching method is in line with the new MELS curriculum? If yes, did you adapt your teaching method to the new program or was it your perception of ESL teaching?
- How do you integrate grammar lessons into your teaching?

2) Maximizing Use of English (vs French)

- What strategy(ies) do you use to encourage the students to interact in the target language in class? Give specific examples.
- Do they make greater use of the strategies over time? What proof do you have of this?
- Do you find that students use of English changed since the beginning of the program?

3) Pair Work/ Group Work

- How often do you use pair/group work?
- Do you prefer to use pair work or group work and why?
- How do you form your pairs/groups?
- In what way do you think that pair/group work can contribute to second language learning?
- Do you use any particular strategies to encourage the students to interact in the target language during pair/ group work? If so, please explain exactly what you do.
- Do you teach students any strategies to get them to cooperate better together? Do you think this is necessary?
- Do you use roles? Why or why not?
- Are there any students in your class who do not like group work? If yes, do you know the reason why?
- Have you ever encountered problems with pair/group work that affected the performance of a team? If yes, what was it and how did you solve the problem?
- Based on your teaching experience, is pair/group work more effective for some students than others? If yes, how can you explain it?

4) Cooperative Learning

- What do you understand by CL?
- Generally speaking, how do you feel about using cooperative learning activities in class?
- How do you feel about doing CL activities for this study?

B) Questions Asked at the End of the Study

1) General Feedback

- Were you familiar with the CL activities used for the study? If not, will you use them – or similar activities – in your future classes? Why or why not?
- How would you improve the activities?

APPENDIX E: Ethical Considerations

The present project was submitted to the Ethics Committee. You will find in this section a copy of the consent forms addressed to the students, the parents, the teacher and the school.

**Formulaire d'assentiment
(à l'intention des élèves)****Présentation de la chercheure**

Cette recherche est réalisée dans le cadre du projet de maîtrise de Madame Nathalie Gagné, dirigé par Madame Susan Parks, du département des langues, linguistique et traduction à l'Université Laval.

Avant d'accepter de participer à ce projet de recherche, il serait important de prendre le temps de lire et de comprendre les renseignements qui suivent. Ce document t'explique le but de ce projet de recherche, ses procédures et ses avantages. Nous t'invitons à poser toutes les questions que tu jugeras utiles à la personne qui te présente ce document.

Nature de la recherche

Évaluer l'utilité des activités d'apprentissage coopératif en classe de langue seconde.

Déroulement de la participation

La participation à cette recherche consiste à:

Pour les élèves:

- travailler en petits groupes de quatre à la réalisation de neuf activités pédagogiques préalablement approuvées par ton enseignante d'anglais;
- accepter d'être filmé et enregistré à l'aide d'un microphone lors de la réalisation des activités pédagogiques.

Utilisation d'équipement électronique

Afin de réaliser le volet recherche de notre projet, une caméra digitale sera utilisée en classe. Celle-ci nous permettra d'observer la communication non-verbale utilisée lors des activités et sera positionnée de façon à capter tous les membres de l'équipe de façon générale. Quelques petits microphones seront également utilisés dans le but d'assurer un meilleur enregistrement sonore des interactions.

Avantages liés à ta participation

- tous les élèves de ta classe auront la chance de participer à un tirage qui se tiendra lors de la dernière observation en classe et ce, afin de vous remercier de m'avoir accueillie pour réaliser ce projet;
- un prix de participation réservé exclusivement aux enfants qui auront collaboré à la recherche sera également tiré le même jour.

Participation volontaire et droit de retrait

Tu es libre de te retirer du projet de recherche en tout temps sans avoir à justifier ta décision. Puisque ta participation à la recherche est complètement indépendante du programme scolaire, ta décision d'y participer ou de t'en retirer n'aura aucun effet sur tes résultats académiques.

Confidentialité et gestion des données

Les mesures suivantes seront appliquées pour assurer la confidentialité des renseignements fournis par les participants:

- les participants ainsi que l'enseignante seront identifiés par des pseudonymes;
- seule la chercheuse pourra visionner les cassettes vidéos et écouter les enregistrements sonores;
- lorsque la rédaction du projet sera terminée, soit aux alentours de mai 2009, toutes les données ainsi que tous les enregistrements visuels et sonores seront détruits.
- En ce qui concerne les enregistrements vidéo, il n'y aura aucune diffusion des images.

Renseignements supplémentaires

Toute question concernant ce projet de recherche pourra être adressée à :

Nathalie Gagné
Étudiante à la maîtrise en linguistique,
Université Laval
Tél. : (418) 261-6876
Courriel : nathalie.gagne.7@ulaval.ca

Susan Parks, PhD
Directrice de recherche
Département de langues, linguistique
traduction
Université Laval
Québec, Canada, G1K 7P4
Tél. : (418) 656-2131 poste 6367
Télécopieur : (418) 656-2622
Courriel : susan.pars@lli.ulaval.ca

Remerciements

Ta collaboration est très précieuse pour nous permettre de réaliser cette étude et nous te remercions d'y participer.

Choix de participation et signature

Tu peux participer à mon projet de recherche de trois façons. Merci de bien vouloir m'indiquer clairement ton choix en encerclant le chiffre correspondant à la façon dont tu souhaites participer à cette étude.

- 1) J'accepte d'être filmé, à l'aide d'une caméra digitale placée au fond de la classe, alors que je serai en compagnie des autres élèves et que mon enseignante donnera les consignes concernant les activités. J'accepte également de porter un microphone et d'être filmé pendant les activités en petits groupes.
- 2) J'accepte d'être filmé, à l'aide d'une caméra digitale placée au fond de la classe, alors que je serai en compagnie des autres élèves et que mon enseignante donnera les consignes concernant les activités. Cependant, je refuse de porter un microphone et d'être filmé avec les trois autres élèves de mon équipe pendant les activités en petits groupes.
- 3) Je refuse d'être filmé, à l'aide d'une caméra digitale placée au fond de la classe, alors que je serai en compagnie des autres élèves et que mon enseignante donnera les consignes concernant les activités. Je refuse également de porter un microphone ou d'être filmé lors des activités en petits groupes.

Un court résumé des résultats de la recherche sera expédié aux participants qui en feront la demande en indiquant l'adresse courriel ou postale où ils aimeraient recevoir le document. Les résultats ne seront pas disponibles avant janvier 2009. Si cette adresse changeait d'ici cette date, tu es invité(e) à informer la chercheuse de ta nouvelle adresse où tu souhaiterais recevoir ce document.

Adresse courriel: _____

Ou adresse postale: _____

Je soussigné(e) _____ consens librement à participer à la recherche intitulée « *L'apprentissage coopératif et les activités de production orale dans un cours d'anglais intensif de niveau élémentaire à Québec* ». J'ai pris connaissance du formulaire et j'ai compris le but, la nature et les avantages du projet de recherche. Je suis satisfait(e) des explications, précisions et réponses que la chercheuse m'a fournies, le cas échéant, quant à ma participation à ce projet.

J'accepte d'être filmé **oui** **non**

Signature du participant, de la participante

Date

Plaintes ou critiques

Toute plainte ou critique sur ce projet de recherche pourra être adressée au Bureau de l'Ombudsman de l'Université Laval :

Pavillon Alphonse-Desjardins, Bureau 3320
2325, rue de l'Université
Université Laval
Québec (Québec) G1V 06A
Renseignements-Secrétariat : (418) 656-3081
Télécopieur : (418) 656-3846
Courriel : info@ombudsman.ulaval.ca

Nathalie Gagné
Étudiante à la maîtrise en linguistique

Susan Parks, PhD
Professeure agrégée

Formulaire de consentement parental

Présentation de la chercheure

Cette recherche est réalisée dans le cadre du projet de maîtrise de Madame Nathalie Gagné, dirigé par Madame Susan Parks, du département des langues, linguistique et traduction à l'Université Laval.

Avant d'accepter que votre enfant participe à ce projet de recherche, veuillez prendre le temps de lire et de comprendre les renseignements qui suivent. Ce document vous explique le but de ce projet de recherche, ses procédures et ses avantages. Nous vous invitons à poser toutes les questions que vous jugerez utiles à la personne qui vous présente ce document.

Nature de la recherche

Évaluer l'utilité des activités d'apprentissage coopératif en classe de langue seconde.

Déroulement de la participation

La participation à cette recherche consiste à:

Pour les élèves:

- travailler en petits groupes de quatre à la réalisation de neuf activités pédagogiques préalablement approuvées par l'enseignant d'anglais;
- accepter d'être filmé et enregistré à l'aide d'un microphone lors de la réalisation des activités pédagogique.

Pour les parents:

- permettre la participation de votre enfant aux activités en anglais réalisées dans le cadre du projet de recherche.

Utilisation d'équipement électronique

Afin de réaliser le volet recherche de notre projet, une caméra digitale sera utilisée en classe. Celle-ci nous permettra d'observer la communication non-verbale utilisée lors des activités et sera positionnée de façon à capter tous les membres de l'équipe de façon générale. Quelques petits microphones seront également utilisés dans le but d'assurer un meilleur enregistrement sonore des interactions.

Avantages liés à la participation de votre enfant

- tous les élèves de la classe auront la chance de participer à un tirage qui se tiendra lors de la dernière observation en classe et ce, afin de les remercier de m'avoir accueillie pour réaliser ce projet;
- un prix de participation réservé exclusivement aux enfants qui auront collaboré à la recherche sera également tiré le même jour.

Participation volontaire et droit de retrait

L'enfant est libre de se retirer du projet de recherche en tout temps sans avoir à justifier sa décision. Puisque sa participation à la recherche est complètement indépendante du programme scolaire, sa décision d'y participer ou de s'en retirer n'aura aucun effet sur ses résultats académiques.

Confidentialité et gestion des données

Les mesures suivantes seront appliquées pour assurer la confidentialité des renseignements fournis par les participants:

- les participants ainsi que l'enseignante seront identifiés par des pseudonymes;
- seule la chercheuse pourra visionner les cassettes vidéos et écouter les enregistrements sonores;
- lorsque la rédaction du projet sera terminée, soit au alentours de mai 2009, toutes les données ainsi que tous les enregistrements visuels et sonores seront détruits.
- en ce qui concerne les enregistrements vidéo, il n'y aura aucune diffusion des images.

Renseignements supplémentaires

Toute question concernant ce projet de recherche pourra être adressée à :

Nathalie Gagné
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traduction
Université Laval
Québec, Canada, G1K 7P4
Tél. : (418) 656-2131 poste 6367
Télécopieur : (418) 656-2622
Courriel : susan.pars@lli.ulaval.ca

Remerciements

La collaboration de votre enfant est précieuse dans la réalisation de cette étude et nous vous remercions à l'avance de permettre à votre enfant d'y participer.

Choix de participation et signature

Merci de bien vouloir m'indiquer clairement votre décision en encerclant le chiffre correspondant à votre réponse.

1) Participation avec enregistrements sonores et visuels

J'accepte que mon enfant soit filmé, à l'aide d'une caméra digitale située au fond de la classe, alors qu'il sera en compagnie des autres élèves et que son enseignante expliquera les consignes concernant les activités. J'accepte également que mon enfant porte un microphone et soit filmé pendant les activités en petits groupes.

2) Participation avec enregistrements visuels seulement

J'accepte que mon enfant soit filmé, à l'aide d'une caméra digitale située au fond de la classe, alors qu'il sera en compagnie des autres élèves et que son enseignante expliquera les consignes concernant les activités. Cependant, je refuse que mon enfant porte un microphone et soit filmé pendant les activités en petits groupes.

3) Participation sans enregistrements sonores et visuels

Je refuse que mon enfant soit filmé, à l'aide d'une caméra digitale située au fond de la classe, alors qu'il sera en compagnie des autres élèves et que son enseignante expliquera les consignes concernant les activités. Je refuse également que mon enfant porte un microphone ou soit filmé lors de l'activité en petits groupes.

Un court résumé des résultats de la recherche sera expédié aux parents des participants qui en feront la demande en indiquant l'adresse courriel ou postale où ils aimeraient recevoir le document. Les résultats ne seront pas disponibles avant janvier 2009. Si cette adresse changeait d'ici cette date, vous êtes invité(e) à informer la chercheuse de la nouvelle adresse où vous souhaitez recevoir ce document.

Adresse courriel: _____

Ou adresse postale: _____

Je soussigné(e) _____ consens librement à ce que mon enfant participe à la recherche intitulée « *L'apprentissage coopératif et les activités de production orale dans un cours d'anglais intensif de niveau élémentaire à Québec* ». J'ai pris connaissance du formulaire et j'ai compris le but, la nature et les avantages du projet de recherche. Je suis satisfait(e) des explications, précisions et réponses que la chercheuse m'a fournies, le cas échéant, quant à ma participation à ce projet.

J'accepte que mon enfant soit filmé **oui** **non**

Signature du parent

Date

Plaintes ou critiques

Toute plainte ou critique sur ce projet de recherche pourra être adressée au Bureau de l'Ombudsman de l'Université Laval :

Pavillon Alphonse-Desjardins, Bureau 3320
2325, rue de l'Université
Université Laval
Québec (Québec) G1V 06A
Renseignements-Secrétariat : (418) 656-3081
Télécopieur : (418) 656-3846
Courriel : info@ombudsman.ulaval.ca

Nathalie Gagné
Étudiante à la maîtrise en linguistique

Susan Parks, PhD
Professeure agrégée

**Formulaire de consentement
(à l'attention de l'enseignante d'anglais)**

Présentation de la chercheure

Cette recherche est réalisée dans le cadre du projet de maîtrise de Madame Nathalie Gagné, dirigé par Madame Susan Parks, du département des langues, linguistique et traduction à l'Université Laval.

Avant d'accepter de participer à ce projet de recherche, veuillez prendre le temps de lire et de comprendre les renseignements qui suivent. Ce document vous explique le but de ce projet de recherche, ses procédures et ses avantages. Nous vous invitons à poser toutes les questions que vous jugerez utiles à la personne qui vous présente ce document.

Nature de la recherche

Évaluer l'utilité des activités d'apprentissage coopératif en classe de langue seconde.

Déroulement de la participation

La participation à cette recherche consiste à:

Pour les élèves:

- travailler en petits groupes de quatre à la réalisation de neuf activités pédagogiques préalablement approuvées par l'enseignant d'anglais;
- accepter d'être filmé et enregistré à l'aide d'un microphone lors de la réalisation des activités pédagogique.

Pour les parents:

- permettre la participation de leur enfant aux activités en anglais réalisées dans le cadre du projet de recherche.

Pour l'enseignante d'anglais:

- permettre à la chercheure d'observer et d'enregistrer à l'aide d'une caméra digitale et de microphones le déroulement des activités relatives au projet de recherche;
- accepter de répondre à une brève entrevue portant sur des questions concernant principalement le déroulement des activités en petits groupes en classe. (30 minutes);
- accepter de donner les consignes pour chacune des neuf tâches coopératives;
- accepter de former des groupes de travail hétérogènes;
- accepter de distribuer le matériel didactique et d'animer les activités en classe.

Pour la direction de l'école:

- permettre à la chercheuse de travailler en collaboration avec l'enseignante d'anglais.

Utilisation d'équipement électronique

Afin de réaliser le volet recherche de notre projet, une caméra digitale sera utilisée en classe. Celle-ci nous permettra d'observer la communication non-verbale utilisée lors des activités et sera positionnée de façon à capter tous les membres de l'équipe de façon générale. Quelques petits microphones seront également utilisés dans le but d'assurer un meilleur enregistrement sonore des interactions.

Avantages liés à la participation

Pour les élèves:

- tous les élèves de la classe auront la chance de participer à un tirage qui se tiendra lors de la dernière observation en classe et ce, afin de vous remercier de m'avoir accueillie pour réaliser ce projet;
- un prix de participation réservé exclusivement aux enfants qui auront collaboré à la recherche sera également tiré le même jour.

Pour l'enseignante:

- un montant de 125.00\$ vous sera remis pour l'achat de matériel pédagogique de votre choix afin de vous remercier pour votre participation à cette étude.

Participation volontaire et droit de retrait

L'enseignante d'anglais et les enfants sont libres de se retirer du projet de recherche en tout temps sans avoir à se justifier et ceci même si la direction de l'école a autorisé le projet. Puisque la participation à la recherche est complètement indépendante du programme scolaire, la décision d'y participer ou de s'en retirer n'aura aucun effet sur les résultats académiques des enfants.

Confidentialité et gestion des données

Les mesures suivantes seront appliquées pour assurer la confidentialité des renseignements fournis par les participants:

- les participants ainsi que l'enseignante seront identifiés par des pseudonymes;
- seule la chercheuse pourra visionner les cassettes vidéos ou écouter les enregistrements sonores;

- lorsque la rédaction du projet sera terminée, soit au alentours de mai 2009, toutes les données ainsi que tous les enregistrements visuels et sonores seront détruits.
- en ce qui concerne les enregistrements vidéo, il n'y aura aucune diffusion des images.

Renseignements supplémentaires

Toute question concernant ce projet de recherche pourra être adressée à :

Nathalie Gagné
Étudiante à la maîtrise en linguistique,
Université Laval
Tél. : (418) 261-6876
Courriel : nathalie.gagne.7@ulaval.ca

Susan Parks, PhD
Directrice de recherche
Département de langues, linguistique
traduction
Université Laval
Québec, Canada, G1K 7P4
Tél. : (418) 656-2131 poste 6367
Télécopieur : (418) 656-2622
Courriel : susan.pars@lli.ulaval.ca

Remerciements

Votre collaboration est très précieuse dans la réalisation de cette étude et nous vous remercions à l'avance d'y participer.

Participation et signature

Vous êtes libre de participer à ce projet de recherche. Vous pouvez aussi mettre fin à votre participation sans conséquence négative ou préjudice et sans avoir à justifier votre décision. Si vous décidez de mettre fin à votre participation, il est important d'en prévenir la chercheuse dont les coordonnées sont incluses dans ce document. Tous les renseignements personnels vous concernant seront alors détruits.

Si vous désirez en faire la demande, un court résumé des résultats de la recherche vous sera expédié. Pour ce faire, veuillez indiquer l'adresse courriel ou postale où vous aimeriez recevoir le document. Les résultats ne seront pas disponibles avant janvier 2009. Si cette adresse changeait d'ici cette date, vous êtes invitée à informer la chercheuse de la nouvelle adresse où vous souhaitez recevoir ce document.

Adresse courriel: _____

Ou adresse postale: _____

Je soussigné(e) _____ consens librement à participer à la recherche intitulée « *L'apprentissage coopératif et les activités de production orale dans un cours d'anglais intensif de niveau élémentaire à Québec* ». J'ai pris connaissance du formulaire et j'ai compris le but, la nature et les avantages du projet de recherche. Je suis satisfait(e) des explications, précisions et réponses que la chercheuse m'a fournies, le cas échéant, quant à ma participation à ce projet.

J'accepte d'être filmé _____ oui _____ non

Signature de l'enseignante d'anglais

Date

Plaintes ou critiques

Toute plainte ou critique sur ce projet de recherche pourra être adressée au Bureau de l'Ombudsman de l'Université Laval :

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2325, rue de l'Université
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Québec (Québec) G1V 06A
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Nathalie Gagné
Étudiante à la maîtrise en linguistique

Susan Parks, PhD
Professeure agrégée



Faculté des lettres
Département des langues, linguistique et traduction

**Lettre d'information
(À l'attention du directeur de l'école)**

Québec, mars 2008

Cher Monsieur Savard,

Mon nom est Nathalie Gagné et je suis étudiante à la maîtrise en linguistique à l'Université Laval. Je travaille sous la supervision de Madame Susan Parks. Je poursuis présentement une recherche sur l'apprentissage de l'anglais langue seconde à l'intérieur d'un projet réalisé dans une classe d'anglais intensif.

Dans ce projet, les enfants travailleront en petits groupes de quatre étudiants à la réalisation de neuf activités pédagogiques qui ont été spécialement développées par la chercheuse et approuvées par l'enseignante d'anglais. Chacune des activités a été conçue afin d'encourager la coopération lors de la réalisation des tâches et a pour but de favoriser la communication orale en langue seconde.

Vous trouverez tous les détails relatifs à mon projet de recherche sur le document d'information en annexe.

Si vous désirez de plus amples informations au sujet de cette étude, n'hésitez surtout pas à communiquer avec moi. Il me fera plaisir de répondre à toutes vos questions.

Je vous remercie à l'avance de l'attention que vous portez à ma demande et vous prie d'agréer, Monsieur Savard, l'expression de mes sentiments les plus dévoués.

Nathalie Gagné

Document d'information
(à l'attention de la direction de l'école)

Présentation de la chercheure

Cette recherche est réalisée dans le cadre du projet de maîtrise de Madame Nathalie Gagné, dirigé par Madame Susan Parks, du département des langues, linguistique et traduction à l'Université Laval.

Avant d'accepter que le projet de recherche soit effectué dans votre école, veuillez prendre le temps de lire et de comprendre les renseignements qui suivent. Ce document vous explique le but de ce projet de recherche, ses procédures et ses avantages. Nous vous invitons à poser toutes les questions que vous jugerez utiles à la personne qui vous présente ce document.

Nature de la recherche

Évaluer l'utilité des activités d'apprentissage coopératif en classe de langue seconde.

Déroulement de la participation

La participation à cette recherche consiste à:

Pour les élèves:

- travailler en petits groupes de quatre à la réalisation de neuf activités pédagogiques préalablement approuvées par l'enseignant d'anglais;
- accepter d'être filmé et enregistré à l'aide d'un microphone lors de la réalisation des activités pédagogique.

Pour les parents:

- permettre la participation de leur enfant aux activités en anglais réalisées dans le cadre du projet de recherche.

Pour l'enseignante d'anglais:

- permettre à la chercheure d'observer et d'enregistrer à l'aide d'une caméra digitale et de microphones le déroulement des activités relatives au projet de recherche;
- accepter de répondre à une brève entrevue portant sur des questions concernant principalement le déroulement des activités en petits groupes en classe. (30 minutes);
- accepter de donner les consignes pour chacune des neuf tâches coopératives;
- accepter de former des groupes de travail hétérogènes;
- accepter de distribuer le matériel didactique et d'animer les activités en classe.

Pour la direction de l'école:

- permettre à la chercheuse de travailler en collaboration avec l'enseignante d'anglais.

Utilisation d'équipement électronique

Afin de réaliser le volet recherche de notre projet, une caméra digitale sera utilisée en classe. Celle-ci nous permettra d'observer la communication non-verbale utilisée lors des activités et sera positionnée de façon à capter tous les membres de l'équipe de façon générale. Quelques petits microphones seront également utilisés dans le but d'assurer un meilleur enregistrement sonore des interactions.

Avantages liés à la participationPour les élèves:

- tous les élèves de la classe auront la chance de participer à un tirage qui se tiendra lors de la dernière observation en classe et ce, afin de vous remercier de m'avoir accueillie pour réaliser ce projet;
- un prix de participation réservé exclusivement aux enfants qui auront collaboré à la recherche sera également tiré le même jour.

Participation volontaire et droit de retrait

L'enseignante d'anglais et les enfants sont libres de se retirer du projet de recherche en tout temps sans avoir à se justifier et ceci même si la direction de l'école a autorisé le projet. Puisque la participation à la recherche est complètement indépendante du programme scolaire, la décision d'y participer ou de s'en retirer n'aura aucun effet sur les résultats académiques des enfants.

Confidentialité et gestion des données

Les mesures suivantes seront appliquées pour assurer la confidentialité des renseignements fournis par les participants:

- les participants ainsi que l'enseignante seront identifiés par des pseudonymes;
- le nom de l'école ne sera mentionné à aucun moment
- seule la chercheuse pourra visionner les cassettes vidéos ou écouter les enregistrements sonores;
- lorsque la rédaction du projet sera terminée, soit au alentours de mai 2009, toutes les données ainsi que tous les enregistrements visuels et sonores seront détruits.
- en ce qui concerne les enregistrements vidéo, il n'y aura aucune diffusion des images.

Renseignements supplémentaires

Toute question concernant ce projet de recherche pourra être adressée à :

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Télécopieur : (418) 656-2622
Courriel : susan.pars@lli.ulaval.ca

Remerciements

Votre collaboration est très précieuse dans la réalisation de cette étude et nous vous remercions à l'avance d'y participer.

Si vous désirez en faire la demande, un court résumé des résultats de la recherche vous sera expédié. Pour ce faire, veuillez indiquer l'adresse courriel ou postale où vous aimeriez recevoir le document. Les résultats ne seront pas disponibles avant janvier 2009. Si cette adresse changeait d'ici cette date, vous êtes invitée à informer la chercheure de la nouvelle adresse où vous souhaitez recevoir ce document.

Adresse courriel: _____

Ou adresse postale: _____

Je soussigné(e) _____ atteste que j'ai pris connaissance du projet de recherche intitulée « *L'apprentissage coopératif et les activités de production orale dans un cours d'anglais intensif de niveau élémentaire à Québec* ». J'ai compris le but, la nature et les avantages de ce projet et je suis satisfait des explications, précisions et réponses que la chercheuse m'a fournies.

Signature du directeur de l'école

Date

Plaintes ou critiques

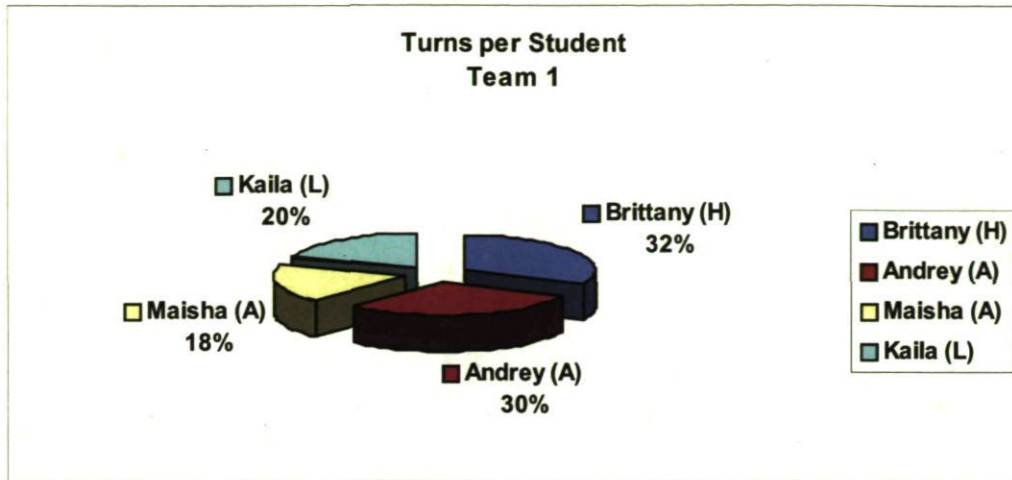
Toute plainte ou critique sur ce projet de recherche pourra être adressée au Bureau de l'Ombudsman de l'Université Laval :

Pavillon Alphonse-Desjardins, Bureau 3320
2325, rue de l'Université
Université Laval
Québec (Québec) G1V 06A
Renseignements-Secrétariat : (418) 656-3081
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Courriel : info@ombudsman.ulaval.ca

Nathalie Gagné
Étudiante à la maîtrise en linguistique

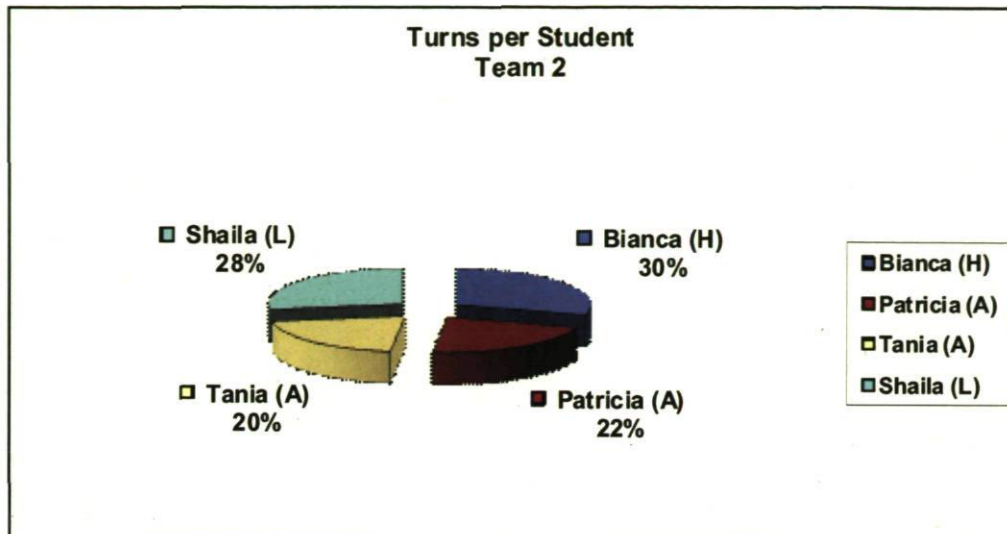
Susan Parks, PhD
Professeure agrégée

APPENDIX F: Average Number of Turns per Student (Team 1)



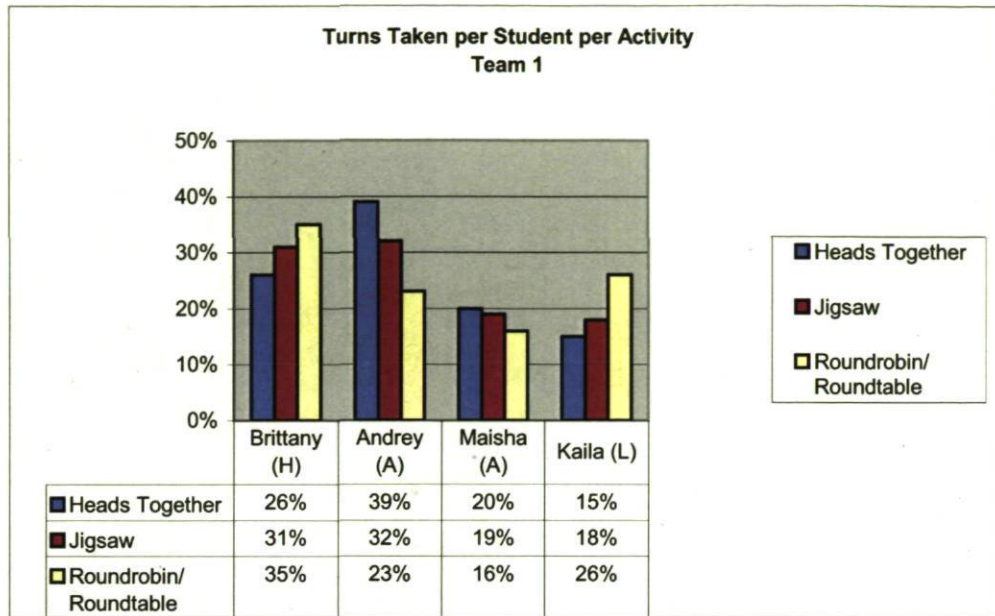
Note: H = high achiever, A = average achiever, L = low achiever

APPENDIX G: Average Number of Turns per Student (Team 2)



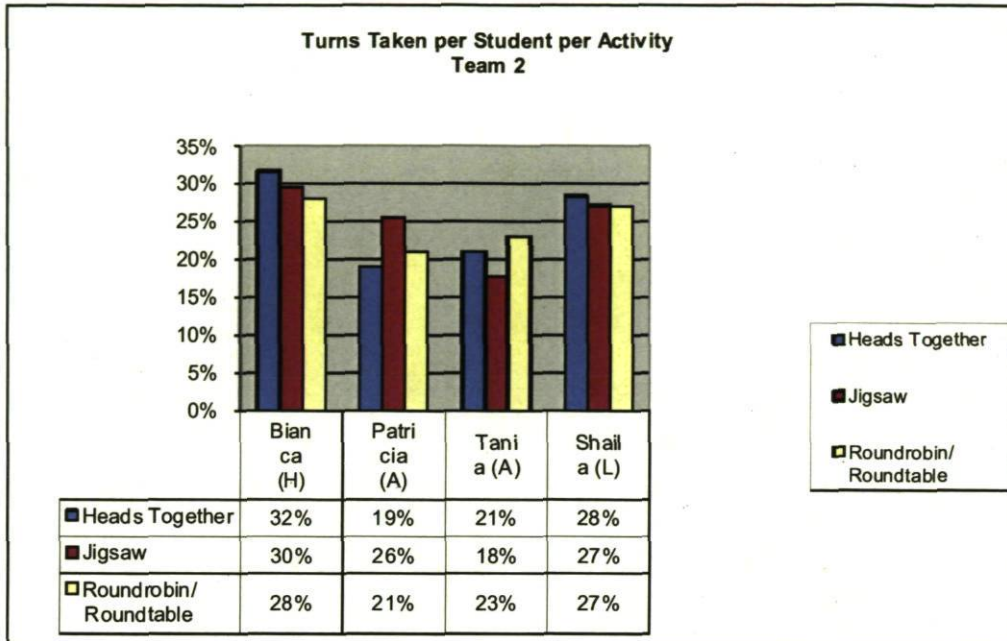
Note: H = high achiever, A = average achiever, L = low achiever

APPENDIX H: Average Number of Turns per Student per Activity (Team 1)



Note : H = high achiever, A = average achiever, L = low achiever

APPENDIX I: Average Number of Turns per Student per Activity (Team 2)



Note : H = high achiever, A = average achiever, L = low achiever