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AN INVESTIGATION INTO THE EFFECTS OF USING COOPERATIVE LEARNING ACTIVITIES ON VOCABULARY LEARNING IN THE 10TH GRADE ENGLISH COURSE

MA THESIS

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ABSTRACT

AN INVESTIGATION INTO THE EFFECTS OF USING COOPERATIVE LEARNING ACTIVITIES ON VOCABULARY LEARNING IN THE 10TH GRADE ENGLISH COURSE MA THESIS Meral YAVUZ KARTAL

The study aimed at investigating whether the implementation of cooperative learning (CL) activities, in the subject of English classrooms, will have an effect on students' academic achievement of vocabulary learning and recalling levels of the vocabulary. It was an experimental study in which cooperative learning method was compared with traditional learning method. This study was conducted in Ezine Anatolian High School, Çanakkale. The subjects were from the researcher's two English classes of 10th grade in the second semester of 2011. One class was selected as a control group and the other one was experimental group. The experimental group received teaching method using cooperative learning method and Jigsaw technique which was a cooperative learning technique, while the control group received traditional teaching method. The treatment phase lasted for two weeks period. Data were gathered in this study using types of sources; pre- test, post-test, delayed-post test (VKS) and students' comments on cooperative learning activities. To determine the effect of cooperative learning method on achievement in vocabulary learning and recall levels of students, non-parametric tests were used for analysing techniques. Data analysis revealed that both the experimental and the control groups showed positive performance of vocabulary learning. However after the treatment respondents of the experimental group showed better performance than the control group who did not show similar achievement. The experimental group outscored significantly the control group on post-test showing the supremacy of cooperative learning method over traditional learning method. Furthermore a delayed posttest showed that the recall levels of the students in the experimental group were better than the students' recall levels of the control group. Moreover, the students' comments on cooperative learning revealed that students had positive attitudes towards cooperative learning. Hence, the ultimate result of the study indicated that cooperative learning method was more effective for vocabulary learning of English as compared to the traditional learning method.

Keywords: Cooperative Learning, Traditional Teaching, Vocabulary Learning, Foreign Language Learning.

ÖZET

10. SINIF İNGİLİZCE DERSİ ÖĞRENCİLERİNİN KELİME ÖĞRENMELERİNDE İŞBİRLİKLİ ÖĞRENMENİN ETKİSİNİN İNCELENMESİ

YÜKSEK LİSANS TEZİ

Meral YAVUZ KARTAL

Bu çalışmada, işbirlikli öğrenme yöntemi aktivelerinin İngilizce dersinde uygulanmasının öğrencilerin kelime öğrenmeleri ve öğrenme kalıcılık düzeyleri üzerinde etkisinin olup olmadığı araştırılmaktadır. Çalışmada deneysel yöntem deseninde olup işbirlikli öğrenme metodu ile geleneksel öğretim yöntemi karşılaştırılmıştır. Çalışma, Çanakkale Ezine Anadolu Lisesi'nde gerceklestirilmiştir. Çalışmanın örneklemini 2010-2011 öğretim yılı ikinci dönemindeki iki şube 10. sınıf öğrencileri oluşturmaktadır. Sınıflardan biri kontrol, diğeri deney grubu olarak secilmiştir. Deney grubunda isbirlikli öğrenme yöntemi ve bir işbirlikli öğrenme tekniği olan Jigsaw tekniği uygulaması ile ders işlenirken, kontrol grubun da geleneksel öğretim yöntemi ile ders işlenmiştir. Uygulama safhası iki hafta sürmüştür. Bu çalışmada verilerin toplanmasında kelime bilgi ölçeğinden oluşan ön-test, son-test, ertelenmiş son-test kullanılmıştır. İşbirlikli öğrenme yönteminin öğrencilerin kelime öğrenimi ve kelimeleri akılda tutma düzeyleri üzerinde olan etkilerini belirlemek için, non-parametrik istatistik analiz teknikleri uygulanmıştır. Veri analizleri sonuçlarına göre, her iki grup ta kelime öğrenmede olumlu performans sergilemişlerdir. Ancak uygulama sonrasında, deney grubundaki öğrenciler kontrol grubundaki öğrencilere kıyasla daha iyi bir performans göstermişlerdir. Son-test sonuçlarına göre deney grubu kontrol grubuna göre önemli bir başarı göstermistir. Bu da isbirlikli öğrenme yönteminin geleneksel öğrenme modeline göre daha etkili olduğunu göstermiştir. Ayrıca ertelenmiş post-test sonuçları, deney grubundaki öğrencilerin kelimeleri hatırlama düzeylerinin kontrol grubundan ki öğrencilerin kelime hatırlama düzeylerinden daha yüksek olduğunu ortaya koymuştur. Ek olarak, öğrencilerin işbirlikli öğrenme yöntemi hakkında ki yorumlarına göre, öğrencilerin işbirlikli öğrenmeye karşı olumlu tutumları olduğunu ortaya koymuştur. Sonuç olarak çalışmanın nihai sonucu, işbirlikli öğrenme yönteminin İngilizce kelime öğretimi üzerinde, geleneksel öğretim yöntemine kıyasla daha etkili olduğunu göstermiştir.

Anahtar Kelimeler: İşbirlikli Öğrenme, Geleneksel Öğretim, Kelime Öğrenimi, Yabancı Dil Eğitimi

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PART I INTRODUCTION

1.1. Introduction

This chapter aims to make an introduction to the study. To do this, this chapter will firstly focus on the role of English and the place of vocabulary knowledge in language proficiency. It will also touch on the problems of English language teaching in Turkey. Then, it will briefly review the current situation in our understanding and practice of cooperative learning. In this chapter, I will also present the statement of the problem I investigate. Following this, I will outline the purposes of the research and research questions that will be answered. This chapter also outlines the significance of the study within the framework of current knowledge

1.2. Background of the Study

English language has gained much importance over the past hundred years. It has become the world language in the areas of research, education, technology, trade, commerce, tourism and banking (Mbaya, 2001).

There are more people who speak English as a second language than people who speak English as a first language. English is used in many countries today either as a first language or as an alternative means for cross-cultural communication. Roughly 700 million people speak it. There has been an increase of 40 per cent in the last 20 years and a total that represents more than one-seventh of the world's population (König, 1990). There are many reasons why English has become so popular. One of them is that English has become the language of business. Another important reason is that popular American culture (like movies, music, and McDonald's) has quickly spread throughout the world. It has brought its language with it.

1.2.1. Language proficiency and vocabulary knowledge

Language proficiency is the ability of an individual to speak or perform in an acquired language. In order to speak a language people need to learn some vocabulary of the target language. Vocabulary is central to language and very important in language learning. It is nearly impossible to understand a written text without knowing the vocabularies of it, and also for most of the language learner, one the most frustrating thing is not to understand the vocabularies you need in a dialogue. A language learner always needs some vocabulary knowledge for four skills of a language. It is not very easy to speak, write or listen something without enough vocabularies. The more vocabulary you learn the more proficient you become. Therefore vocabulary learning plays an important role in language learning and language proficiency. Vocabulary is also very important for both social and academic language acquisition. Without needed words is not very easy to develop BICS and CALP. People need lots of words when they interact socially with other people. Large amount of words is also needed for academic language acquisition (Roessingh, 2004).

1.2.2. Current teaching methodologies and cooperative learning method

The understanding of the processes second language learning has changed considerably in the last 50 years. Early views of language learning focused primarily on the mastery of grammatical competence. Language learning was viewed as a process of mechanical habit formation. Good habits are formed by having students produce correct sentences and not through making mistakes. Errors were to be avoided through controlled opportunities for production. By memorizing dialogs and performing drills the chances of making mistakes were minimized. Learning was very much seen as under the control of teacher. Only teacher had a chance to make all the decisions. On the other hand, language learning has been viewed from a different perspective in recent years. Richards, (www.professorjackrichards.com) defined that traditional approaches to language teaching gave priority to grammatical competence as the basis of language proficiency. They were based on the belief that grammar could be learned through direct instruction and through a methodology that made much use of repetitive practise and drilling. Although grammar based instruction was predominant method in 19th century, it brought lots of educational problems in language learning. Some of them were; traditional teaching methods were not student-centred, there were not much interaction between the learner and the language. Because of the fact that, with traditional teaching methods, educational problems and also language learning-vocabulary learning problems cannot be solved, researchers have been working on new methods or approaches which are more communicative, humanistic and learner oriented. One of the most popular of them is cooperative learning. Cooperative learning involves students working together in pairs or groups, and they share information and they are working together with same purpose (Açıkgöz, 1993). Cooperative learning activities give some opportunities to students such as sharing their information, supporting each other,

being aware of their learning process and interacting to each other. This interaction affects the classroom atmosphere and friendship in a positive way and improves success and motivation of the students (Yıldız, 1998).

In contrast to traditional teaching model, where the authority is the teacher and more teacher-centred classes, cooperative learning has number of advantages on language learning process. Cooperative learning involves small group work which positively affects students' success. The benefits of facilitating effective small-group work with problem-solving tasks are widely researched in the educational community. Small-group work presents opportunities for learners to share insights, explain their thinking, observe the strategies of others, and listen to explanations.

Seen from this perspective, the traditional autocratic teaching style, whereby the teacher makes virtually all the decisions, dictating policy and actions, never discussing the schedule or asking for input from the members, is an obstacle to group development because it does not allow for the group to structure itself organically, or for the members to share increasing responsibility (Oxford and Nyikos, 1997).

Johnson & Johnson (1994) also said that cooperative learning is a student-centred approach that believes that active learning is more effective than passive one where the teacher becomes a facilitator rather than an instructor. Through cooperative learning, students have to exchange ideas, make plans and propose solutions to accomplish a collaborative goal. Therefore, it can enhance students' social and personal developments (Johnson & Johnson, 1994). Cooperative learning makes the process of learning more meaningful for learners because of the act of discussing and sharing information, and giving and receiving opinions.

Another advantage of cooperative learning over traditional classroom organization for the acquisition of language was the amount of language output allowed per student. The amount of student talk could be maximized through activities that involve pair work (Talk-Pair) and group work (Inside-Outside Circle), as these would engage all the students in speaking (McGroarty, M. 1989 cited in Tsailing Liang, 2002).

Some reasons of cooperative learning's benefits on language learning can be listed as below.

- 1. The educational philosophy: Active learning method.
- 2. Purpose: Learners are learning something in cooperation.
- 3. Starting point: Subject content.
- 4. Process: Students work together in small groups and they try to understand subject.
- 5. Student: Participant. He/she is responsible for both her/his own learning and also the other group's members' learning.
- 6. Teacher: Tutor and supporter. Teacher organizes the groups and determines teaching- learning objectives.
- 7. Testing and Evaluation: Different testing and evaluation techniques are used during the process (Doymuş, Şimşek and Şimşek 2005).

1.2.3. Situation in Turkey

Being a widely used language all around the world, after the World War II, English has gained popularity in Turkey too. At this period there was a sudden increase in the motivation to learn English, and this tendency has continued since then (G.König, 1990). English is one of the compulsory subjects taught in government primary and secondary schools in Turkey. After the World War II, some of the methods were used in ELT in schools of Turkey. First Audio-lingual method was primarily used one in most of the schools. Then direct method gained importance in some of the schools. In the late 1960, The Grammar Translation method, which has long been the predominant English teaching method in Turkey now, became the foremost approach. Although different methods have been used by the teachers, it is a well-known fact that English language teaching/learning is problematic in Turkey (Aktas, 2005; Isik, 2008; Oguz, 1999; Paker, 2007; Tilfarlioglu & Ozturk, 2007, cited in Kızıldağ, 2009). We have been hearing those who have been learning English at schools for years; yet, many couldn't reach the desired communicative level to follow even basic level of conversations unless they enrol at private language schools or visit an English speaking country exclusively. One of the main reasons of such an unsuccessful result is the instructional method used by the teachers of English.

Most of the methods that mentioned above have some limitations for communicative skills. Some of them are highly rule-based while the others highly teacher-centred or mechanical. Aktas (2005) stated that a balanced instructional approach is vital since too much focus on meaning fails to create the knowledge of structure necessary for anything beyond the

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most basic conversational skills. As Norris and Ortega (2000; cited in K1z1ldağ, 2009) believe that teaching structures implicitly are effective but not the over reliance on structure, which will cause boredom among the students. In contrast to traditional teaching method, cooperative learning is much more student-centred, communicative and interactive. Small group work in cooperative learning presents opportunities for learners to share insights, explain their thinking, observe the strategies of others, and listen to explanations. These benefits result in successful language learning and using. As the vocabulary is central to language, the students need to have large numbers of words in order to communicate in target language. Students usually complain about lacking of vocabulary while they are communication skills because of having limited vocabulary knowledge. As the vocabulary is very important for successful language learning and communication, cooperative learning serves many advantages for vocabulary learning too. Although cooperative learning has many advantages on vocabulary and language learning, it can be said that cooperative learning is not widely used among the teachers of English in Turkey.

1.3. Purpose of the study

In this study; the researcher aims to find out whether cooperative learning helps to improve students' vocabulary learning. This study brings together the fields of cooperative learning and vocabulary learning. The purpose of the study is to discover the effects of cooperative learning on vocabulary learning. Therefore to reach a deeper understanding of how cooperative learning methods facilitate students' vocabulary learning, the researcher will try to observe students' reactions and responses to one another within groups during cooperative learning activities during class sessions, and understand students' interaction patterns during cooperative learning process in natural settings. Specific purposes of the study are listed as follows.

- 1. The study will investigate if there is an improvement of students' vocabulary learning by using cooperative learning method.
- 2. The study will examine the students' perceptions of improvement in vocabulary learning after learning through cooperative learning.

1.4. Research questions

- i. Is there any significant difference between pre-test scores of experimental group and control group according to achievement of learning vocabulary?
- ii. Is there any significant difference between post-test scores of experimental group and control group according to achievement of learning vocabulary?
- iii. Is there any significant difference between pre-test, post-test and delayed-post test scores of experimental group and control group according to achievement of learning vocabulary?

1.5. Significance of the study

It is a pretty well known reality that English language teaching and learning has some problems in Turkey especially due to the lack of authentic language input. Moreover there are different problems too caused by variety of reasons. As being a central to a language vocabulary learning is affected in a negative way by these problems too. Among these problems, maybe the most important one is poor instructional method. Too much focus on structure is given importance by the most of the teachers. The goal of English language teachers is to enhance students' achievement, and the goal of the English Foreign language students is to have great deal of vocabulary knowledge in order to speak an acquired language. Since the students usually complain about lack of vocabulary knowledge when they are working on four skills of a language, alternative teaching method should be used while teaaching vocabulary. One way of the enhance students ' vocabulary knowledge to use cooperative learning as a teaching method(Alhaidaire ,2006).

The present study aims to investigate the role of cooperative learning method on vocabulary learning. It was intended that the study would enhance language teachers' understanding of the vocabulary learning among the students so that adjustments could be made to vocabulary teaching. The study may prove helpful in bringing innovations in the classroom. English teachers working in the field can utilize the concept of cooperative learning method for providing practice in different aspects of language.

The study will also be useful because the results will be a guideline for the teachers to determine the specific difficulty encountered by the students in vocabulary learning process.

The teachers can be aware of different ways to enhance their students' vocabulary learning. They can discover the effectiveness of student- centred classroom activities in contrast to teacher- centred activities. This study may prove helpful to the students. In daily life, our students avoid speaking English because of little confidence. Altough they have the knowlegde of English, most of the time they can not use it.

The use of cooperative learning method which includes more interactions among students may provide life like situation for the learning of English and the students may feel themselves more confident.

Further the study will reach some data on students' attitudes toward cooperative learning activities. The students' perceptions on group working which are aimed to gain in this study will help teachers to design appropriate teaching activities for successful vocabulary learning.

Moreover this type of research has not been conducted extensively in Turkey, and also I was failed to find current studies investigating specifically the role of cooperative learning method on English vocabulary teaching and learning. So this study will help to determine if cooperative learning can improve vocabulary learning of students in Anatolian High Schools of Turkey. Cooperative learning method serves a different instructional method in contrast to vocabulary teaching methods used by the teachers such as memorization, Turkish translation of the vocabulary in Turkey. This study may also be helpful for English language material developers and curriculum masters.

1.6. Limitations of the study

This study has some of limitations. Firstly the size of the sample is small. The participants were 36 students selected from Ezine Anatolian High School. The study was conducted only in two 10th classes in the school. Therefore the generalizability of the results is also limited because of the small scale of the study. Time constraint was another limitation. The study was conducted during two weeks period with four hours of class time per week. In addition, the researcher was limited by experience when implementing the jigsaw strategy. The researcher was implementing a method of teaching that was new to her and it was believed that this could distort the findings of the project. Another limitation was the location

which was a small, rural community. As students were from small school and have similar diversities, the results may not apply to a large spectrum within education.

PART II REVIEW OF LITERATURE

2.1. Introduction

In this part, at first the researcher will explain some concepts like Cooperative learning, some elements of Cooperative learning, the comparison between the cooperative learning and Traditional teaching method and some concepts related to vocabulary learning. Finally the researcher will mention about previous studies on the role of cooperative learning on vocabulary learning and language learning.

2.2. Cooperative Learning

For more than a decade, cooperative learning has been a popular method in educational circles. It is a pedagogical practice that has attracted much attention over the last three decades of a large body of research that indicates students gain both academically and socially when they have opportunities to interact with others to accomplish shared goals (Johnson & Johnson, 2002; Lou et al., 1996; Slavin, 1996). Johnson, Johnson, and Smith (1995), claimed that CL is one of the most thoroughly researched areas in educational psychology.

As being a popular practise, many researchers have been trying to define the term of "cooperative learning". The most common definition is done by Johnson & Johnson. According to Johnson & Johnson (1998), cooperative learning is grouping students together to accomplish shared learning goals. Students work in small groups of three or four to get the most out of their own learning and each other's learning. They encourage and support each other to learn and are responsible for their own as well as their teammates' learning.

Johnson & Johnson (1998) also said that Cooperative learning is a student centred approach that believes that active learning is more effective than passive one where the teacher becomes a facilitator rather than an instructor. Through cooperative learning, students have to exchange ideas, make plans and propose solutions to accomplish a collaborative goal. Therefore, it can enhance students' social and personal developments. Cooperative learning (CL) is an outgrowth of the work of social scientists' research on group dynamics, social relationships, teaching, and learning (Antil, Jenkins,Wayne, and Vadasy 1998). CL is an alternative to traditional, competitive classrooms. In cooperatively structured activities groups of students work together to accomplish a well defined, shared goal.

According to the data of some researchers and practitioners, students working in small cooperative groups can develop the type of intellectual exchange that fosters creative thinking and productive problem solving (Southwest Consortium for the Improvement of Mathematics and Science Teaching, 1994).

Cooperative learning involves group work but each group work activity done in the classroom, cannot be considered as a cooperative group work. In contrast to group work, CL is actually a highly structured method defined as 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' (Olsen and Kagan 1992: 8). As an addition to Olsen and Kagan's explanation of Keyser (http://escholarshare.drake.edu) pointed out that cooperative learning needs to be planned, with consideration given to the appropriate size of the group, to each student's role within the group, and to how the results will be evaluated and used in the class session. Every student in a cooperative learning group should have a role or part to play in order to accomplish the task. It is not just any "group work." Like active learning, the particular group exercise must be chosen for the academic task and the students who must accomplish it. One of the strength of groups in cooperative learning method is that, each student is responsible for achieving the goal. In the literature on CL, it has been emphasized that the essential element of this definition was that all students in cooperative groups contributed to the academic and social benefit of the group (Johnson & Johnson, 1990a; Slavin, 1995; Kagan, 1992). An individual's success within the group is dependent on the group's success (Slavin, 1995).

2.3. Elements of Cooperative Learning

In this part some main elements of cooperative learning which are taught to be the basic elements for successful cooperative learning activities will be defined. These five mains elements are; positive interdependence, individual accountability, face to face promotive interaction, social skills and group processing.

2.3.1. Positive interdependence

Positive interdependence means a sense of working together for a common goal and caring about each other's learning. A learning activity becomes cooperative only when everyone realizes that no group member can be successful unless all group members are successful. The "we're all in this together" part of group work is the positive interdependence. Johnson and Johnson (1990a) explained that "students must believe that they are linked with others in a way that one cannot succeed unless the other members of the group succeed.

Johnson and Johnson (1999a) also claimed that with positive interdependence students developed an awareness that they needed to help each other to ensure that all members had an understanding of a concept before moving on. Group members act as knowledge resources and partners in learning (Tanner, Chatman & Allen, 2003). They take the time to help each other, because they are concerned about the success of all group members. Those students who are struggling with a concept will reach out to the group for help. The group will also work harder, even in frustration, to help one another to learn because they genuinely care about their own and their group members' success (Johnson & Johnson, 1990a).

A well-structured positive interdependence is a vital stone for an effective cooperative learning activity. There are number of ways of structuring positive interdependence within a learning group. The teacher has things to do for encouraging positive interdependence. Teachers must structure learning tasks so that students come to believe that they sink or swim together— that is, their access to rewards is as a member of an academic team where in all members receive a reward or no member does. Essentially, tasks are structured so that students must depend upon one another for their personal, teammates', and group's success in completing the assigned tasks and mastering the targeted content and skills. According to Sharan (1980) within cooperative learning situations, students have two responsibilities: 1) learn the assigned material, and 2) ensure that all members of the group learn the assigned material. The technical term for that dual responsibility was positive interdependence. Johnson & Johnson, (1994) stated that, when positive interdependence was clearly understood, it establishes that: (1) Each group member's efforts were required and indispensable for group success (no "free-riders"); (2) Each group member had a unique contribution to make to the joint effort because of his or her resources and/or role and task responsibilities.

Positive goal interdependence, role interdependence, and resource interdependence are the key elements of structuring positive interdependence effectively. In positive goal interdependence, students perceive that they are able to achieve their learning goals if and only if all the members of their group also attain their goals. They have a sense of being together for a common goal. According to Johnson & Johnson (1994), positive goal interdependence can be structured by informing group members they are responsible for: (1) all members scoring above a specified criterion when tested individually, (2) the overall group score being above a specified criterion, (3) one product successfully completed by the group. Another important element is role interdependence. In role interdependence each student is assigned complementary and interconnected roles such as reader, recorder, encourager, time keeper and checker. By assigning roles, each student has responsibility in order to complete the joint task. The last important element is resource interdependence. In resource interdependence, materials, resources and information are divided among group members. In order to achieve the goal all the materials, resources and information have to be combined.

2.3.2. Individual accountability

Individual accountability is another important element of cooperative learning. It is the measurement of whether or not each group member has achieved the groups' goal. Assessing the quality and quantity of each member's contributions and giving the results to all group members" (Johnson, Johnson, & Holubec, 1998). Each group member should have some specific responsibility that contributes to the learning of all group members. At the same time, each group member should reach a certain minimum level of mastery.

Individual accountability occurs when every student in groups have a sense of feeling in charge of his/her own and his/ her own teammate's learning and makes a great contribution to the group. In groups, each student should be aware of what are the other students doing in their group. All group members' contribution is needed for the achievement of group. Therefore each student makes some contributions.

A well-structured individual accountability help students to accomplish the same kind of tasks by themselves better. They learn to do something together so that they can do it easier when they are alone. On the other hand if it is poorly structured, it may reduce feelings of personal responsibility. Members may reduce their contributions to goal achievement when the group works on tasks where it is difficult to identify members' contributions, when there is an increased likelihood of redundant efforts, when there is a lack of group cohesiveness, and when there is lessened responsibility for the final outcome (Harkins & Petty 1982; Ingham et al. 1974; Kerr & Bruun 1981; Latane et al. 1979; Moede 1927; Petty et al. 1977; Williams 1981; Williams et al. 1981). Low individual accountability may also cause social loafing. A social loafer is a person exerting less efforts to achieve a goal when the/she works in a group than when he/she works alone. If, however, there is a high individual accountability, and if each member contributions can be easily observed, if there are no redundant efforts, if all the members have responsibility for the ultimate goal if the group cohesiveness is high, then the social loafing effect vanishes.

2.3.3. Face to face promotive interaction

Face to face interaction is another important element of cooperative learning. Stahl (1994) claimed that students need to arrange themselves so that they are positioned and postured to face each other for direct eye-to-eye contact and face-to-face academic conversations using "12 inch voices."

According to Kern, et al (2007) promotive interaction occurs when "individuals encourage and facilitate the efforts of other's to achieve and complete task in order to reach the group's goals". By face to face promotive interactions students help each other overcome problems. They provide the feedback between members necessary for all individuals to test ideas and build a framework for their knowledge, and they provide resource sharing. All the ideas are heard and valued and all the members actively contribute to the task. This is an

overall attitude of the team members toward one another (Kern et al, 2007). These features and interactions motive them to continue to work on the task at hand.

Face to face promotive interaction is an essential element for cooperative groups. However, if it is not facilitated in such a way that is promotive, benefits of it cannot be seen. When group members are able to provide each other with efficient and effective help or assistance toward accomplishing the goal, then the face to face promotive interaction is promotive.

2.3.4. Social skills

The fourth important element of cooperative learning is the appropriate use of social skills. Students must have some features to coordinate efforts to achieve mutual goals. First of all, students should know each other and trust themselves. Secondly, they should communicate in an accurate way and unambiguously. Students should also accept and support each other in order to overcome the problems during the small group activities. Johnson & Johnson, (1999b) also mentioned some basic skills required for effective cooperative learning interaction. Knowledge and application of appropriate social skills such as effective communication skills, trust building, decision making and conflict management is as important to the CL exercise as learning the content itself, because the learning that occurs is dependent on the functioning of the group.

Although social skills have positive effects, it is not guarantee that each small group has high social skills. Because of not being born instinctively knowing how to interact effectively with others, students must be taught social skills required for high quality cooperation and be motivated to use them if cooperative groups are to be productive. Therefore, it has been important for teachers to be knowledgeable and prepared to manage cooperative groups to maximize the important attributes of well-functioning groups (Webb, 1993). It has also been important for the teacher to model these behaviours and attitudes and give recognition to groups who practice them appropriately to reinforce them in all groups (Cooper, 1990; Webb, 1993).

The more socially skilful students are and the more attention teachers pay-to teaching and rewarding the use of social skills, the higher the achievement that can be expected within cooperative learning groups (Roger and Johnson 1994).

2.3.5. Group processing

The last basic important element of cooperative learning is, group processing. Groups' reflections on how well they are functioning facilitate the effective group work. Kern et al. (2007) stated that group processing is used to clarify and improve the effectiveness of the members in contributing to the collaborative efforts of the group. Group processing may be also defined as "reflecting on a group session to a) describes which members' actions were helpful and unhelpful and b) make decisions about what actions to continue or change" (Sharan, 1990, p. 32).

Groups must be given opportunities to reflect on the goals of a task as well as provide rationales and make decisions about how the actions taken support achievement of the goals. Groups need to describe what member actions were helpful and not helpful in completing the group's work and make decisions about what behaviours to continue or change. In order to achieve these, Kern et al.(2007) listed several qualifications of such a well group processing; it, 1) enables learning groups to focus on maintaining good working relationships among members, 2) facilitates the learning of cooperative skills, 3) ensures that members receive feedback on their participation, 4) ensures that students think on the meta-cognitive as well as the cognitive level, and 5) provides the means to celebrate the success of the group and reinforce the positive behaviours of group members.

2.4. The Role of Cooperative Learning in Language Classrooms

Cooperative learning method is an alternative teaching method that can be used in teaching English in classes. Being a student-centred method cooperative learning has some advantages on teaching English in classes. According to results from some research such as in (Kagan,1995; Johnson& Johnson 1990a) cooperative learning has a positive effect on teaching English. Effective CL can have a positive and dramatic effect in the second language classroom (Kagan 1995). Effective CL activities foster the use of authentic language in a meaningful context. Students are engaged in listening, speaking, reading, and writing in order

to accomplish a shared task, and students adjust their language to facilitate comprehensibility, use developmentally appropriate language, and operate within their zone of proximal development (Vygotsky 1978). Cooperative learning groups, when well designed, give students the opportunity to discuss a topic in a variety of ways, from different perspectives. This creates multiple opportunities for comprehensible input and output. Rather than only answering questions or engaging in practice dialogue, students have the opportunity to use their second language authentically with each other. Besides these benefits, a great number of tasks can be adopted in teaching English cooperatively. Some of them are; group discussion, scenario, role play, vocabulary learning, reading together, preparing a project etc...

Researchers and practitioners have found that students working in small cooperative groups can develop the type of intellectual exchange that fosters creative thinking and productive problem solving. Student interaction makes cooperative learning powerful. To accomplish their group's task, students must exchange ideas, make plans, and propose solutions. Thinking through an idea and presenting it in a way that can be understood by others is intellectual work and will promote intellectual growth. The exchange of alternative ideas and viewpoints enhances that growth and stimulates broader thinking. It is the teacher's job to encourage such exchanges and structure the students' work so their communication is on-task and productive (Southwest Consortium for the Improvement of Mathematics and Science Teaching, 1994).

In addition to intellectual growth, cooperative learning enhances students' social and personal development. Group members can learn to work together in classrooms that reflect the complexity and diversity of the world. Students' lives are full of interactions with friends, family members and strangers and their futures will find them in jobs that require cooperation. The skills that are essential for productive group work in the classroom are relevant for today and the future.

Moreover, when students work cooperatively together, they show increased participation in group discussions, demonstrate a more sophisticated level of discourse, engage in fewer interruptions when others speak, and provide more intellectually valuable contributions (Gillies, 2006; Webb & Farivar, 1999). By working cooperatively, students develop an understanding of the unanimity of purpose of the group and the need to help and support each other's learning which, in turn, motivates them to provide information, prompts,

reminders, and encouragement to others' requests for help or perceived need for help (Gillies, 2003a; Gillies & Ashman, 1998).

Small group activities are usually done by the teachers in English classes in Turkey. On the other hand, all small group activities cannot be considered as a cooperative learning activity. Cooperative learning is not the same as ability grouping, where a teacher divides up the class in order to instruct students with similar skills. It is also not having students sit side by side at the same table to talk while they complete individual assignments. Cooperative learning is not assigning a task to a group in which one student does the work and the others get equal credit. In classes there are usually high achievers who usually take the responsibility of the task on their own where the other shy or low achiever students have nothing to do. One of the strength of the cooperative learning, all the students has some responsibilities for achieving their goal. By structuring some of the elements of cooperative learning such as, positive interdependence and individual accountability, each student in groups participates in the activities. Cooperative learning is also suitable for all achievers (Malin, 2007). Many researchers have investigated the impact of CL on low-, medium- and high-achieving students of language (Stockdale & Williams, 2004; Webb, 1993). The results were mixed, where some studies revealed the highest achievement gains for high-achievers, and some reported the highest gains for low-achievers (Webb, 1993; Slavin, 1995). However, the more important conclusion for many of these studies was that low-, medium- and high-achieving students, who participated in CL activities had higher levels of achievement than corresponding students in control groups (Slavin, 1995). In contrast to other small group activities, another advantage of cooperative learning that it creates cooperative classroom environments rather than competitive classroom environments where the students compete for grades. Competitive classroom environments encourage students to compete for grades, and ultimately, one or a few students succeed to the detriment of others (Johnson&Johnson, 1990a). In the individualistic classroom, each student works individually to achieve pre-determined standards which are independent of the other student's goals (Johnson & Johnson, 1990a). These two learning strategies are not necessarily wrong or do they always produce negative learning outcomes, however, they can create a classroom environment that does not encourage high academic achievement as a desirable behaviour (Slavin, 1995). Slavin explained that in competitive environments students competed for individual successes at the expense of the other students. As a result, the unsuccessful students reduced their effort because their chances of success were decreased.

CL environments help to eliminate this perception that high academic achievement is unattainable and makes academic achievement a classroom norm. By having students work together cooperatively, the only way that an individual student can succeed is if all the members of the group succeed. Thus, students begin to encourage one another to work hard and strive for maximal achievement together and these attributes become the norm for student behaviour (Slavin, 1995).

One of the advantages of cooperative learning is being a student-centred method. Student-centred approaches to learning place great emphasis on ensuring students are actively involved in their own learning. These approaches to teaching and learning are in contrast to teacher-centred approaches where students have been the passive recipients of knowledge with little control over what and how they learn (Sharan et al. 1999). In cooperative learning groups, students work interdependently without constant and direct supervision from the teacher. The channel of communication in teacher-centred classrooms tends to be one-way as teachers talk at students who are required to listen and respond, often reiterating information provided earlier by the teacher (Turner et al. 2002).

Although cooperative learning has positive effect on teaching English, it may fail to achieve goals if it is not well structured (Jones & Jones, 2008). At that point the teacher has a key role for structuring cooperative learning in classes. In order to have a successful process and product, the teacher has things to do in pre-instructional process such as ; formulating both academic and social skills objectives, deciding on the size of the groups, choosing a method for assigning students to groups, deciding which roles to assign group members, arranging sitting, and preparing materials students need to complete the task.

2.5. Cooperative Learning Activities

Cooperative learning has various activities such as jigsaw technique, numbered heads together and roundtable. I will briefly define the jigsaw technique which one is widely used in cooperative learning classrooms.

2.5.1. Jigsaw Technique

Jigsaw is a cooperative learning technique in which students teach part of the regular curriculum to a small group of their peers (Aronson et al.1978). Over the past years jigsaw technique has been widely used in educational settings. So the researchers have been trying to define and clarify what the jigsaw technique is. Several types of jigsaw have been mentioned by the researchers. These techniques can be categorized into the following models: (a) Jigsaw, developed by Aronson et al. (1978); (b) Jigsaw II, developed by Slavin (1986); (c) Jigsaw III, developed by Stahl (1994); (d) Jigsaw IV, developed by Holliday (1995); (e) Reverse Jigsaw, developed by Hedeen (2003), and (f) Subjects Jigsaw, developed by Doymus (2007). The basic principles of the models are the same.

All jigsaw versions include a group learning activity where each student must cooperate with his or her peers to achieve his or her individual goals. Just as in a jigsaw puzzle, each student's part is essential for the production and full understanding of the final product (Aronson, 2002).

As an initial part, students are divided into several groups and each group usually consists of four to six students. These initial groups are called as home groups. Then the teacher divides a topic or a task into five or six parts. According to numbers of task parts, each member of the home group is assigned a part of the task or topic to learn as an 'expert'. The home groups then break apart, like pieces of a jigsaw puzzle, and the students move into jigsaw groups (sometimes it is also called as expert groups) consisting of members from the other home groups who have been assigned the same part of the given task. While in the jigsaw groups, the students discuss their particular task to ensure that they understand it. Students then return to their home groups, where they teach their material to the rest of their group (Colosi and Zales 1998). Thus all the jigsaw models can enhance cooperative learning by making each student responsible for teaching some of the material to the group. By combining what each individual learns with the material learned by others, jigsaw members are able to form a coherent body of knowledge. Given this structure all JCA versions ensure that learners acquire knowledge in an autonomous and self-regulated way and produce explanations for each other (Zacharia et al.2010). These above characteristics are all same in all jigsaw versions. The differences among them concern primarily the way students' learning is evaluated or the degree of interaction among groups. Jigsaw and Jigsaw II differ only in the fact that team competition is allowed in Jigsaw II. In Jigsaw II the grades are averaged and the team with the best average score is rewarded (Slavin, 1995). In other words, Jigsaw II promotes competition among the groups and rewards the groups that perform the best. Jigsaw III has been designed specifically to increase interaction among students of differing language proficiencies in bilingual classrooms. Jigsaw IV builds on II and III by incorporating quizzes during the process to assess which areas of the curriculum have been well understood by students and which require additional teaching by the instructor. The Reverse Jigsaw differs from Jigsaws I, II, III and IV, in that it focuses on facilitating understanding of the range of participant interpretations on a number of topics (Hedeen, 2003), rather than on comprehending the teaching material prepared by the teacher. The Subjects Jigsaw differs from the other jigsaw versions in that both subjects and students are jigsawed during the learning process (Doymus, 2007).

In order to reach effective jigsaw groups, the number of students is important. Aronson et al. (1978) noted that jigsaw groups should be composed of three to seven students with three to five students being ideal. Aronson and Patnoe (1997) noted several advantages and disadvantages relative to the size of the jigsaw groups. The advantages of the jigsaw strategy were that all students interact with other students and actively engaged in learning the content. One disadvantage of smaller original and expert groups was fewer opportunities for students to work together with other students. A disadvantage of large original and expert groups was that large groups potentially did not effectively engage every student. In theory small groups that had less than three students per a group were too small to engage every student, and small groups that had more than five students per a group were too large to ensure that every student was engaged (Aronson and Patnoe, 1997 as cited in Slagle, 2007).

2.5.2. Grouping Students Heterogeneously

Grouping students heterogeneously means that each group has students with a range of abilities. Russel (2009) indicated that heterogeneous group has academically strong, middle and weak students together. He also added that it was a kind of grouping students according to their ability to negotiate social interactions, distributing the most gregarious and the most reticent students among the different groups.

Cooperative learning groups need heterogeneous grouping. The literature reviewed indicated that the jigsaw method was also aligned with grouping students heterogeneously since it was a cooperative learning technique. Aronson et al. (1978) mentioned that, prior to the class meeting, the teacher should divide students into heterogeneous original groups and expert groups composed of students of diverse races, ethnicities, genders, and academic abilities. In order to do that, teachers must know the abilities of her/his students in advance. Stahl (1994) and Baer (2003) suggested that groups be differentiated by the inclusion of students of high, medium, and low academic ability. Baer (2003) indicated that groups with students of differing academic ability levels provided the students with opportunities to work together to develop teamwork skills as well as to improve social skills.

2.6. Traditional Teaching Method

Traditional teaching method has been widely used in educational settings for years. The traditional teaching method is probably the oldest instructional format and today it is still the most common form of instruction (Hrepic, Zollman & Rebello, 2007 cited in Hatim, 2011). Traditional teaching style is affected by behaviourists. Since they determine what students have to learn from general principles in relation to some particular facts or events, they may design their classroom techniques based on the evidence they observed from the students learning behaviourists. In traditional teaching, a teacher plays an important role in the instructional activities. Their teaching style is highly teacher-driven. The teacher usually dominates and controls the activities of the whole class (Wang, 2007). In traditional method, students are passive recipients of knowledge. On the other hand, teachers have power and responsibility, they play the role of instructor and decision maker. In this method, the instructor talks more or less continuously to the class. The class listens, takes notes of the facts and ideas worth remembering, thinks over them later; but the class does not converse with the instructor.

In traditional method, students are also regarded as having 'knowledge holes 'that need to be filled with information. Orogbu (2010) stated that teachers usually lecture and then give worksheets in traditional classes. They follow the text books completely.

2.7. The Comparison between the Traditional Learning Method and the Cooperative Learning

Traditional teaching method and cooperative learning differ in many ways. Although the achievement of the students on a particular task or subject is aimed in both of them, the rationales, the procedures, and the features of them are quite different. Firstly, traditional teaching is a teacher-centred method while the cooperative learning is student-centred. In traditional learning, the teacher plays an important role in the instructional activities. The teacher usually dominates and controls activities of the whole class (Wang, 2007). Galton (2002) noted that the existing traditional learning which relies very much on a deductive, discovery approach with the teacher expected to guide students towards the discovery of solutions, can results in some unsatisfactory learning outcomes. However, in many classrooms, guided discovery often ends up as teacher direction. Such an approach encourages more dependency on the teacher and less ownership on the part of students for the solution and more student dissatisfaction. In contrast, student-centred approaches demonstrate that students develop better capacities for problem-solving and reasoning and obtain higher learning outcomes when they are able to interact with others, share ideas, challenge perspectives, and discuss alternative propositions before reaching agreement (Rojas-Drummond and Mercer, 2003; cited in Gillies & Haynes 2010). Robinson (1995) indicated that "teacher conceives self as quiet set, demanding, concerned with subject matter and in getting specific tasks done" (p.57). Their teaching materials would be used to present facts and information, and their teaching methods are formal and impersonal.(cited in Wang, 2007). Biggs (2007) stated that wise and effective teaching does not simply involve applying general principles of teaching rather it should aim at engaging students in learning related activities that enable them to theorize, generate new ideas, reflect and solve problems in the target content area. On the other hand, Robinson (1995, cited in Wang, 2007) also stated that in cooperative learning "teacher conceives self as flexible, permissive, and interested in stimulating discussion and seeing other grow". Because of being a student- centred method, the cooperative learning shifts the focus of activity from teachers to the learners. In cooperative learning, students work in teams on problems and projects under conditions that assure both positive interdependence and individual accountability; and inductive teaching and learning, in which students are first presented with challenges (questions or problems) and learn the course material in the context of addressing the challenges, whereas in traditional learning, there is a deductive learning in which teachers first present the subjects.

The roles of teachers and students are also different in many ways. For instance, the teacher plays a role as a supporter, facilitator, observer, change agent and adviser (McDonell, 1992 cited in Wang, 2007) rather than presenter, a controller, or a dominating figure as in traditional learning. In cooperative learning, teacher's role is to arrange the students in heterogeneous groups, to provide students with proper materials, and to design structural systematic teaching strategy (Chen, 1999). The role of the teacher in cooperative small groups is to act as guide as opposed to the leader and content expert within the group (Gillies, 2006 cited in Malin, 2007). Examples of appropriate teachers' behaviours during CL exercises include: a) reducing their role within group to give greater control to the students, b) asking students open-ended questions to stimulate discussion and knowledge elaboration, c) building problem solving skills and social skills, d) ensuring students remain on-task, and e) providing appropriate feedback to students regarding content and group functioning (Gillies, 2006; Steinert, 2004; Draskovic, Holdrinet, Bulte, Bolhuis & van Leeuwe, 2004).

Draskovic et al. (2004) also stated that when the teachers acted as guides, it was more effective than when they lectured to the students, which had a negative impact on students' perceptions of their learning experience. In terms of students, they are usually passive and listen to the teacher's presentation in traditional classrooms. The students do not have many opportunities to activate their critical thinking or improve their creative problem solving skills while cooperative learning classroom serve students a deep understanding a course material, inquiry-based instruction and critical thinking. Students work individually without seeking opinion from their friends in the classroom. The students cannot reach some skills such as social skills, due to the lack of interaction among students. Students usually compete with each other and withhold information they believe 'If you succeed, I lose', while, they cooperate in cooperative learning method. They seek for individual achievement in traditional teaching; on the other hand in cooperative learning, students seek for group success. Each group member believes that they can not succeed unless the other members of the group succeed they believe that 'If you win, I win!'. Only some brilliant students participate in activities and do all the works in traditional method, while in cooperative learning, all the students have some responsibilities and take actively part in each activity and task. In short, Cooperative learning in the classroom has many advantages over the traditional ways of learning in terms of both students and the teachers and also achievement.

The traditional ways of learning involves working individually without seeking opinion from fellow colleagues. With traditional learning techniques, the process of gaining knowledge suffers a lot due to lack of interaction. Students following this technique will remain unaware of the new methods and techniques of problem solving. The total output of student working individually would naturally be less than the combined output of students indulging in cooperative learning. The quality of work delivered by students working in a group will also be far better as compared to the students working individually. This is because in a group, every act or suggestion is cross-checked by other members of the team and hence, chances of errors in work are a minimum. Cooperative learning can also speed up the completion of the task as those working in a group will complete their work faster than those working individually. Cooperative learning is also helpful in development of social skills. Cooperative learning develops self-esteem of the students participating in various creative activities.

Research suggests that cooperative learning bring positive results such as deeper understanding of content, increased overall achievement in grades, improved self-esteem, and higher motivation to remain on task. Cooperative learning helps students become actively and constructively involved in content, to take ownership of their own learning, and to resolve group conflicts.

	Cooperative Learning	Traditional instruction
Dimensions		
Teachers roles	Facilitator, observer, change	Teacher-dominated,
	agent, adviser, and supporter	controller, and authority
Teaching activities	Group discussion, work	Focus on drills and practices
	together effectively, and	as well as memory and
	teamwork skills	review of knowledge
Interaction	Positive interdependence	Negative interdependence
	Two-way communication	One-way transmit
Evaluation	Emphasis of both learning	Emphasis of learning
	process and outcomes	outcomes

Table 1. Comparison between Cooperative and Traditional Classrooms (Wang, 2007)

2.8. Vocabulary Teaching & Learning

Vocabulary is central to language and is of great importance to language learners. It is universally recognized that vocabulary learning is a fundamental component both of acquisition of one's native language and of learning a foreign language. Words are the building blocks of a language since they label objects, actions, ideas without which people cannot convey the intended meaning. Because of being one of the most essential components of language learning, teachers and language learners are typically conscious of the importance of vocabulary knowledge level on communication skills since lexical items carry the basic information people wish to express and comprehend (Nation, 2001 cited in Akbarian 2010).

Although vocabulary is of the most essential components of language learning, the prominent role of vocabulary knowledge in second or foreign language learning has been recently recognized by theorists and researchers. Accordingly, numerous types of approaches, techniques, exercises and practice have been introduced into the field to teach vocabulary (Hatch & Brown, 1995). It has been suggested that teaching vocabulary should not only consist of teaching specific words but also aim at equipping learners with strategies necessary to expand their vocabulary knowledge (Morin & Goebel, 2001).

Teaching vocabulary has been shown great importance by the language teachers since it was a fundamental component of language learning. Two main approaches to vocabulary teaching have been proposed by lexical researchers (Duin and Grave,1987).First one of them is explicit instruction in which vocabulary is directly given to the students. The focuses in explicit instruction are words to be learnt. By giving students explicit instruction in vocabulary, teachers help them learn the meaning of new words and strengthen their independent skills of constructing the meaning of text. Second one is implicit instruction in which students are taught by reading and learning through the context in which an unknown word is surrounded. Within the text, there are some clues for the students for guessing the meaning of unknown words.

In vocabulary teaching, teachers carry great importance. They should know how to teach vocabulary most effectively. According to Wallace (1988) there are some principles while teaching vocabulary. Principles are:

- aim – what is to be taught, which words, how many
- need target vocabulary should respond students' real needs and interests
- frequent exposure and repetition
- meaningful presentation clear and unambiguous denotation or reference should be assured.

Learning vocabulary is a complex process. Traditionally, vocabulary has not been a particular subject for students to learn, but has been taught within lessons of speaking, listening, reading and writing. The students' aim to be reached in learning vocabulary process is primarily their ability to recall the word at will and to recognize it in its spoken and written form. Generally, knowing a word involves knowing its form and its meaning at the basic level. In deeper aspects it means the abilities to know its (Harmer, 1993):

1) Meaning, i.e. relate the word to an appropriate object or context

2) Usage, i.e. knowledge of its collocations, metaphors and idioms, as well as style and register (the appropriate level of formality), to be aware of any connotations and associations the word might have.

3) Word formation, i.e. ability to spell and pronounce the word correctly, to know any derivations (acceptable prefixes and suffixes),

4) Grammar, i.e. to use it in the appropriate grammatical form.

2.9. The Importance of Vocabulary in Second Language Learning

In learning a second language, vocabulary plays a crucial role. It is one element that links four skills of reading, speaking, listening, and writing all together. It is much more than grammars is the key to student understanding what she/he hears and reads in school and have an effective communication with other people. In order to achieve good communication, students should acquire an adequate number of words and should know how to use them accurately. For that reason it is very important for teachers to make students build up a large store of words. It is evident that vocabulary is indispensable for successful communication in any language.

According to Folse (2004) the role of vocabulary in second language classrooms has been showed enthusiastic interest in the last decade. This recent interest has led to research with practical classroom applications for foreign language classrooms. Although it is possible to see the benefits of knowing vocabulary in all language skills, especially in reading comprehension vocabulary plays a vital role. Lehtonen (1998) mentioned that learners often, and certainly in my context, rate vocabulary one of the biggest problems in reading. She also added that her learners claim on one hand, they do not know enough words to understand texts.

Laufer and Hulstijn (2001) stated that all second language learners and their teachers are well aware of the fact that learning a second language involves the learning of large numbers of words. Laufer and Hulstijn (2001) also added that not surprisingly many learners are somewhat apprehensive when faced with such an enormous task and teachers as well as learners have always shown a keen interest in finding out how words can be best learned.

Briefly Learning a language entails learning numerous aspects about that language, including its pronunciation, writing system, syntax, pragmatics, rhetorical modes for reading and composition, culture, and spelling, but the most important aspect is vocabulary (Folse, 2004).

2.9.1. What Do We Know When We Say We Know A Word

Knowing a word is mostly seen as knowing the definition or meaning of a word by the learners. Knowing a word much more than knows its meaning, it involves knowing both its form and its meaning at the basic level. The idea of knowing a word does not mean knowing only its meaning is a well-kown fact that by most of the researchers. Harmer, 1993 mentioned the meaning of a knowing a word in details. He listed the abilities to know a word. These are listed below;

- Meaning, i.e. relate the word to an appropriate object or context
- Usage, i.e. knowledge of its collocations, metaphors and idioms, as well as style and register (the appropriate level of formality), to be aware of any connotations and associations the word might have
- Word formation, i.e. ability to spell and pronounce the word correctly, to know any derivations (acceptable prefixes and suffixes),
- Grammar, i.e. to use it in the appropriate grammatical form

Another researcher, Richards (1976) listed some assumptions about the meaning of 'knowing a word'. Some of them are listed below;

1. Knowing a word means knowing the degree of probability of encountering that word in speech or print. For many words, we also know the sort of words most likely to be found associated with the word.

2. Knowing a word means knowing the syntactic behaviour associated with that word.

3. Knowing a word entails knowledge of the underlying form of word and the derivatives that can be made from it.

4. Knowing a word means knowing the semantic value of the word.

5. Knowing a word means knowing many of the different meanings associated with the word.

2.9.2. Vocabulary Knowledge

As vocabulary acquisition is a key component for improving communication and literacy skills successfully, vocabulary knowledge has a great importance on being a successful language learner. Researchers and theorists have pointed to the fact that vocabulary knowledge is multi-faceted, "a disarmingly simple term for a complex multidimensional phenomenon" (Harley, 1996). Vocabulary knowledge involves not only meaning but also other aspects of the vocabulary knowledge such as receptive vocabularies, productive vocabularies etc... By having both receptive and productive vocabulary knowledge, learners can understand the words when reading or hearing them, and they can use them correctly when producing oral or written language (Nation, 2001).

According to Wesche and Paribakht (1996), vocabulary knowledge deals not only with meaning but with morphology, phonology, syntax, sociolinguistic aspects. So vocabulary knowledge can be enhanced how deep you study on it. Wesche and Paribakht (1996) listed some categories to increase learners' vocabulary knowledge. These categories are;

- 1. Generalization: being able to define the word
- 2. Application: selecting an appropriate use of the word
- 3. Breadth of meaning: recalling the different meanings of the word
- 4. Precision of meaning: applying the word correctly to all possible situations
- 5. Availability: being able to use the word productively.

2.9.3. How Much Vocabulary Does a Learner Need

An important issue in teaching vocabulary is how much vocabulary does a learner need to know to be able to make certain uses of English like speaking, reading a novel or newspaper, watching a movie. There are some researches that have been done to find out how much vocabulary doe a learner need? Hirsh and Nation (1992) for example, tried to understand how many words a learner should know to read a novel by a research. According to results of Hirsh and Nation's study, vocabulary of around 5000 words would be needed for a learner. Although the vocabulary around 5000 is needed it is not always very easy to acquire this number of vocabulary. Thornbury (2002) stated that most adult second language learners will be lucky to have acquired 5000 words families even after several years of study. Thornbury (2002) also stated that this relatively slow progress has less to do with aptitude than with exposure. He added that a classroom learner would need more than eighteen years of classroom exposure to supply the same amount of vocabulary input that occurs in just one year in natural settings.

The amount of vocabulary need may show differences according to specific teaching and learning purposes. For example, a learner for academic purposes, of course no doubt need much more vocabulary than a learner with a purpose for a holiday trip to an English speaking country. Although there are some different thoughts about the size of vocabulary of learner need to know, the number of between the 5,000 and 6,000 words families are needed for a learner. According to Schmitt, (2008) stated that a speaking ability requires the words families between the 5000 and 7000.

2.9.4. How to Teach Vocabulary

It is a well known fact that teaching vocabulary is an important factor in language teaching. Since words are significant for expressing our feelings, emotions and ideas to the others, foreign language teachers should attribute importance to teaching vocabulary in their classes (Hişmanoğlu, 2006). As vocabulary is an important part of a language, teachers should be well aware of way of teaching vocabulary effectively. However lots of theories and techniques were mentioned about vocabulary teaching, it still remains being a complex process. Thus there are some general principles for successful vocabulary teaching which are beneficial for any method. According to Wallace (1998), first principle is the aim which

includes, what is to be taught, which words and how many of them will be taught. The following principle is need which is relevant with the learners' real needs and interests. The third principle is frequent exposure and repetition and the last one is meaningful presentation which should be clear and unambiguous denotation. Besides the general principles about vocabulary teaching, two main learning methods can be applied by the teachers. These main methods are explicit and implicit learning. In explicit learning, teachers give vocabulary directly by means of word list or direct translation, etc whereas in implicit learning teachers help students by more indirect mean such as exposure to words through reading (Carter, 2002).

In addition to the main methods and principles on vocabulary teaching there are some techniques mentioned by some researchers.

Swain and Carroll (1987) listed some techniques for vocabulary teaching. These are; planned /unplanned, systematic/haphazard, written/oral input, building on prior knowledge in L1 and L2 focus on meaning.

According to Ur (1996: 63) there are some other different techniques for presenting vocabulary which are;

- concise definition
- detailed description(of appearance, qualities)
- examples(hyponyms)
- illustration(picture, object)
- demonstration(acting, mime)
- context
- synonym
- opposite(s) (antonyms)
- translation
- associated ideas, collocations (cited in Hişmanoğlu, http://dergiler.ankara.edu.tr/dergiler/27/752/9598.pdf).

2.9.5. How to Test Vocabulary Knowledge

Testing is an important part of teaching vocabulary. Without testing there is no reliable means of knowing how effective a teaching sequence has been (Thornbury, 2002). Testing is an indispensable part of a vocabulary teaching process because it provides feedback both for learners and teachers. According to Thornbury (2002), testing has a useful backwash effect. In backwash effect students are aware of that they are going to be tested on their vocabulary learning , so they may take vocabulary learning process more seriously. Testing motivates students to get ready for the test and this helps them to review the vocabulary that they have already learned. Thornbury (2002) mentioned about two types of testing; informal and formal testing. According to him, informal testing involves testing vocabulary which was covered in the previous lesson. The vocabulary that covered in the previous lesson should be tested at the beginning of the next one. Teachers may test students' previous vocabulary learning by using different ways such as, asking antonyms/ synonyms, using class word box or getting students to test each other. On the other hand formal testing needs certain strategic stages in a course such as placement tests or achievement tests.

There are lots of test largely used in second language classrooms. Some of these test formats are gap-filling, matching, and multiple-choice or some form of translations (Read, 2007). Another popular way for testing vocabulary knowledge is using VKS (Vocabulary Knowledge Scale). Wesche and Paribakht (1996) listed stages of VKS. They are as in below;

- 1. I don't remember having seen this word before;
- 2. I have seen is word before but I don't know what it means
- 3. I have seen is word before and I think it means...
- 4. I know this word. It means...
- 5. I can use this word in a sentence e.g.

As testing both receptive and productive skills VKS is one of the effective ways for testing vocabulary knowledge.

2.10. Related Research on Vocabulary Teaching and Cooperative Learning

The number of research has been carried out on cooperative learning and vocabulary teaching over the years. In this part, the researcher will briefly mention about some research both in Turkey and in the world which are relevant to the researcher's interest.

2.10.1. Research in Turkey

Researchers observed on the effect of cooperative learning and vocabulary teaching stated as under;

In a study conducted by Aslandağ (2008), the effect of cooperative learning method on the academic achievements of 6th grade students in English Course, was tried to find out. In the study, the researcher used an experimental method. The subjects were identified from sixth grade students in one of the primary school in Bor. Both experimental group and control group had 27 students. The researcher applied to both group an English grammar test consisting 50 test items as a pre-test, post-test and permanence test. According to the study' results, Aslandağ (2008) pointed out that cooperative learning has a positive effect on students' academic achievements in English course.

Tok (2008), aimed at to find out whether cooperative learning method of pair check technique has an effect on reading comprehension. In order to understand that the researcher conducted a study on the 3rd grade students attending a public elementary school in Hatay in the second semester of 2006-2007 academic year. The study had an experimental design including pre-test, post-test and control group. The total number of the subject was 128 students. There were 64 students for each group both experimental and control group. As a data collection tool she used a reading comprehension achievement test. Experimental group had a treatment with pair check technique of cooperative learning. After the seven weeks treatment period, Tok (2008), reached a result that cooperative learning method pair check technique increased students' reading comprehension in the Turkish course.

In one of the most important studies Açıkgöz (1993) surveyed 48 university students, identifying the effects of cooperative and traditional teaching methods on students' academic achievements, recalling levels and affective characteristics. In this study the data was collected by a pre- unit test, unit test and short essays of students. The results of the study

showed us that, cooperative learning had more superior effects on students' academic achievements and affective characteristics than the effects of traditional teaching method. In her study Açıkgöz (1993) also found that the cooperative learning had no negative effects on students' recalling levels.

Çelik & Toptaş (2010); pointed out that vocabulary learning strategies showed a positive relation between the frequency of strategy use and the language levels except for the social strategies.

Göngör (2011) researched into the effects of Jigsaw II technique regarding the retention of new words learned in the French reading course. The research's model was comparative unsynchronized group post-test. The participants of the study were the students studying French Foreign Language Department of the Anadolu University. The study revealed that students of the experimental group showed a better performance for remembering new words in contrast to the students on control group using traditional teaching methods.

A study on teaching vocabulary through collocations was done by Balci & Çakır (2012). Pre-test /post-test and control group design was employed to this study. The researchers taught the vocabulary through collocations instead of using classical techniques such as synonyms, antonyms, definition and mother tongue translation in experimental group. The study revealed that teaching vocabulary through collocations results in a better learning outcome in contrast to teaching vocabulary through classical techniques.

2.10.2. Other Research

In a study conducted by Ekawat (2010) to study effects of cooperative learning on EFL university students summary writing and their preferences for cooperative learning. The participants took a pre-test and post- test in traditional individualistic learning and the experimental group took pre-test and post-test with the cooperative learning intervention. In this study two raters rated all the tests using the summary writing rubric. According to the findings of the study, there were significant differences for both learning methods. It showed that cooperative learning was more effective than the traditional learning. Moreover after

administering a preference questionnaire to the participants, the researcher noted that the participants preferred the cooperative learning over the traditional learning method.

Alhaidaire (2006) investigated the effectiveness of using cooperative learning to promote reading comprehension, vocabulary and fluency, achievement scores of male fourth and fifth grade students in a Saudi Arabian School. The research used a quasi-experimental design. The results of the study indicated that, there was significant differences between experimental and comparison groups on post measures of vocabulary and fluency and students' attitudes toward cooperative learning. According to the findings, while cooperative learning had a positive effect for promoting vocabulary and fluency; it has no meaningful effect on students2 reading comprehension and their motivation toward reading.

Suwantarathip and Wichadee (2010), conducted a study with a aim of examining the effectiveness of cooperative learning approach in reducing foreign language anxiety and investigating its impact on language proficiency of 40 students in Bangkok University. In the study, the researcher used three instruments which are, Foreign Language Classroom Anxiety Scale, two proficiency tests covering reading and writing skills and a semi-structured interview. In the study Suwantarathip and Wichadee (2010) found that language anxiety had decreased with cooperative learning approach. Moreover, the researcher obtained higher language proficiency scores after learning through this approach.

Terwel, Gilles, Eeden and Hoek (2001) examined the effects of training in basic communication skills on the processes of co-operation and giving explanation in co-operative groups. The study resulted in that high-ability students gained much more benefits from cooperative learning than low-ability students. In other words, the students with high individual abilities had more co- operation.

Stahl (1986), conducted a model-based meta-analysis on the effects of vocabulary instruction. According to the results of this meta-analysis, teaching vocabulary through reading comprehension had a positive effect on better vocabulary learning. The study also suggested that vocabulary instruction was a useful adjunct to the natural learning from context.

Kojic-sabo and Lightbown, (1999) investigated the students' approaches to vocabulary learning. In order to find out the students' approaches to vocabulary learning and their relationship to success, the researchers, applied a questionnaire to 47 ESL and 43 EFL students. In addition to the Questionnaire, cluster analysis technique was used for finding relatively homogeneous subgroups in a population, identified 8 different profiles of student approaches to lexical learning. Kojic-sabo and Lightbown, (1999) pointed out that there was a possible relationship between the strategy use and achievement level. They also found that, the students with more frequent and elaborate strategy use were associated with higher levels of achievement.

In a case study done by Huck (2006) vocabulary instruction in four middle school content classrooms was investigated. The purpose of this case study was to observe and report the vocabulary instruction that occurred over the period of one week in four 7th grade content classrooms: Language Arts, Math, Social Studies, and Science. The researcher observed the four content teachers of these classes every day for one week at the suburban, Northwest Ohio junior high school at which this study occurred. The findings showed that teachers who had received training in content area reading strategies reflected a higher frequency of vocabulary instruction and devoted more instructional time to vocabulary instruction. The study also showed that generally, specific important direct instruction strategies (such as contextual analysis or conceptual development), indirect instruction (that would provide for independent vocabulary acquisition and reinforcement of direct instruction), and verbally rich environments, were absent from instruction.

PART III METHODOLOGY

3.1. Introduction

This thesis was designed to discover the effects of cooperative learning on vocabulary learning. In this chapter, the methods and procedures that were used throughout the study were described and explained. Along with the methods used in this quasi-experimental study, the research design and participants were also discussed. A description of the investigation is included in the procedures section of the chapter.

3.2. Research Design

In this study, a quasi-experimental design was used. There are several different kinds of experimental design, for example:

- The controlled experiment in laboratory conditions (the true experiment): two or more groups
- The field or quasi-experiment in natural setting rather than the laboratory, but where variables are isolated, controlled and manipulated.
- The natural experiment in which it is not possible to isolate and control variables (Cohen, Manion and Morrison 2007, 274).

A quasi-experimental design is one of the common designs that is used in effect and causal research in social sciences because of its particularity (McBurney and White 2009, 345). A true experiment is one in which the experimenter has complete control over the "who, what, when, where, and how" of the experiment. A **quasi experiment**, by contrast, does not permit the experimenter to control the assignment of subjects to conditions. The word **quasi** means "as if" or "to a degree". Thus, a quasi experiment is one that resembles an experiment but lacks at least one of its defining characteristics. Whereas it is possible to assign subjects to conditions in a true experiment, in a quasi experiment it is necessary to select subjects for the different conditions from previously existing groups. For example if researchers were interested in gender differences in detecting hidden figures, however, you would have to conduct a quasi experiment because you cannot assign participants to the two conditions, male and female. Here, the researcher cannot create groups of males and females, but instead

selects members from pre-existing groups (McBurney and White 2009, 345-346; Jackson 2011, 144). "**The non-equivalent groups design**" is used. The non-equivalent groups design is probably the most frequently used design in social research. It is one of the most intuitively sensible designs around. If researcher wants to study effects of program (experiment), researcher probably recognizes the need to have a group of people receive the program. That is program (experiment) group, and researcher probably sees that it would be sensible to measure that group before and after the program so researcher can see how much the program improved or changed them. That is the pre-post measurement. Researcher will readily admit that it would be nice to have a comparable group that differs from program (experiment) group in only one respect-it doesn't get the program. That is control group (Trochim&Donnely 2006, 210-211).

Groups	Pretest	Treatment	Posttest
Experimental group	Pr	X ₁	Ро
Control group	Pr	X_2	Ро

Table 2. The Nonequivalent Groups Design (Trochim&Donnely 2006, 211).

In this research, researcher aims to discover the effects of cooperative learning on vocabulary learning through different instructional designs has been applied two groups, experimental and control groups. Researcher has selected these groups from pre-existing groups that are students in the Çanakkale Ezine Anatolian High School.

In this research, parallel to research design, achievement test (pre test and ost test) and observation method were used and cooperative learning has been used for experimental group as an instructional design while traditional learning has been used for control group.

The study was conducted in Ezine Anatolian High School. The school had a small size. The total number of students in the school was approximately 200. The students were accepted to the school with an exam. The school was located in a rural area of Çanakkale. Most of the students lived in Ezine or nearby villages. The students had not any experience different teaching and learning methods such as cooperative learning. So Ezine Anatolian High School and students in it are so suitable for experiment.

3.3. Participants

Two classes of the tenth grade students at Ezine Anatolian High School in the spring semester of 2011 were selected to be the participants. One class was chosen as a control group and the other one was chosen as an experimental group. They were assigned randomly to experimental and control group. A total of 36 students participated in the study. Among these 36 students, 21 students were female and 15 students were male. Control group consisted of 16 students and the experimental group consisted of 20 students.

Both classes have more or less the same English proficiency level as well as family background. Most of their parents are farmers and they are living in Ezine which is a small county of Çanakkale.

3.3.1. Grouping students:

In the experimental group, there were 20 students. These 20 students were divided into 4 groups. There were 5 members in each group. While grouping students several factors were taken into consideration to be able to reach heterogeneous group. Grouping students heterogeneously is relevant to the cooperative learning activities. When groups are maximally heterogeneous and the other essential elements are met, students tend to interact and achieve in ways and at levels that are rarely found in other instructional strategies. They also tend to become tolerant of diverse viewpoints, to consider others' thoughts and feelings in depth, and seek more support and clarification of others' positions (Stahl, 1994).

In this study the students grouped according to their English proficiency backgrounds, their academic abilities and their gender. The participants of this study have similar English proficiency background. They had learned English since they were the fourth grade in primary school. In addition to this students' pre-test scores supported the idea that they have similar English proficiency background. The other important factor while grouping students is their academic abilities. Stahl (1994) and Baer (2003) suggested that groups be differentiated by the inclusion of students of high, medium, and low academic ability. Baer (2003) indicated that groups with students of differing academic ability levels provided the students with opportunities to work together to develop teamwork skills as well as to improve social skill. According to the students' previous semester final grades (see Appendix 1), there were 2 high achievers in the experimental group and 2 in the control group. There were 2 low achievers who scored under 50 (English exam score) in the experimental group and 2 in the control

group. The rest of the students grades were at a medium level between the scores 50-79 (English exam score). In the experimental group, while choosing members of each group, high achievers, medium achievers and low achievers tried to be divided equally. See the experimental and control groups' students' English marks in Appendix 1.

Control group

One of the two classes was assigned randomly as a control group. There were 16 students in the control group. 9 of them were female and 7 of them were male students. In this study traditional teaching method based on whole-class teaching was applied to the control group.

Experimental group

The experimental group included 20 students who studied together in four groups which included 5 members in each. They had lessons according to the dynamics of cooperative learning and Jigsaw method.

The profiles of groups were shown in the below table.

Group category	Numbers of students	Numbers of female studens	Numbers of male students	Teaching strategy	Numbers of high English ability	Numbers of average English ability	Numbers of low English ability
Control				Traditional			
group	16	9	7	teaching	4	10	2
				method			
Experimental				Cooperative			
group	20	10	10	learning	4	14	2

Table 3. The Profiles of Students Attended Research

3.3.2.Role Assignments

In the experimental group, there were 4 groups of teams. Each group has 5 members. During the process of cooperative learning activities on vocabulary learning, each member in the groups was given different roles. Kagan (1989) said that one of the important factors that distinguish cooperative learning from regular group learning is giving roles to the members of groups. Assigning roles to the members, increases students' responsibility towards their own group. It also helps deepen the positive interdepence among group members. By giving roles to the members of group, we can avoid the occurrence of free riders or potential complaint of overloading from some high achievers. The roles that given to the members were ; recorder, checker, time keeper, reporter and encourager. Each role explained in detail by the researcher before the activities. Adapted from Kagan (1989), the responsibility of each role was explained in detail in below:

3.3.3.Role Job Description

Recorder: The recorder needs to take notes during the discussion. The written report will be given to the reporter.

Summarizer: The summarizer makes sure everyone in the group understands what is being learned.

Reporter: The reporter is responsible for reporting the summary of his/her group's discussion to the class on behalf of his/her team.

Time keeper: The timer controls the time given to their group and makes sure that the assigned task is completed in time. If time is not enough to complete the task, the timer has to request more time from the teacher.

Checker: the checker checks the understanding of the students in his7her own group.

3.4. Instrumentation

In this study, some data collection tools were used. They were achievement test on vocabulary learning (pre-test, post- test, delayed post-test) and student evaluation form.

3.4.1. Achievement Test

Pre-test

A pre-test adapted Paribakht and Wesche, 1997 was administered to the students of control and experimental groups. Partial knowledge of words is inevitable both in L1 and L2 (Wesche and Paribakht, 1996). The authors propose a Vocabulary knowledge scale (VKS) illustrating varying levels of vocabulary knowledge (Paribakht and Wesche, 1997: 180). Table below illustrates different levels of vocabulary knowledge. The test included 6 sections for each vocabulary. The sections were listed below.

1. I don't remember having seen this word before.

2. I have seen this word before, but I don't know what it means.

3. I haven't seen this word before, but I think it means.

4. I have seen this word before, and I think it mean (Synonym or translation)

5. I know this word. It means (Synonym or translation)

6. I can use this word in a sentence :.....(if you do this section, please also do section 5.)

The pre-test consisted of 20 vocabulary selected from the short story. They were, tile, good looking, shy, wine, hill, horn, toot, roof, suntan, edge, slip away, church, coat, slippery, perhaps, suddenly, usual, around, asleep and wave. As being English teacher of the students , the researcher had background information about the students' vocabulary levels so the researcher decided on these 25 vocabulary which were most probably not known by the students. Among these 25 vocabulary, 20 of them which were not known by all the students , were chosen for the pre- test.

Post-test

Post test was the same with pre-test. After the treatment it was administered both the experimental and control group. The aim of the administering pre-test was the measure of students' achievements on vocabulary learning.

Delayed post-test

A delayed post- test which was the same with pre and post- test was administered to the both groups 10 days later after the treatment. With the delayed post-test, the researcher aimed at finding out whether the learning was permanent or not.

3.4.2. Student evaluation form

After the lessons, one self- group evaluation form was given to the experimental group to evaluate the effectiveness of using cooperative learning in learning vocabulary of English. Each group completed the evaluation form (Appendix 5.). The aim of these evaluation forms was to get some feedback from the students about the treatment. The feedback provided data whether the students liked the lessons and their thoughts on group work whether they were productive or not.

3.5. Procedures

Before the three instruments were administered, the researcher gave information about the study to the students. The researcher then explained clearly to them why their participation was necessary, and the data would be used only for academic purposes only. The researcher also recognized the right of any participants to withdraw from the research for any or no reason, and at any time.

In the study, overall experiment process lasted for three weeks. Both groups were taught by the same instructor. Before treatment process, a pre-test which was taken from Paribakht and Wesche, 1997 was given to the experimental and control group. The pre-test includes 25 vocabularies taken from a short story in the book of Reading Circles (Sister Love). There were six sections on the pre-test for each vocabulary (Appendix 2). In the pre-test the students were asked to put a tick on any grade which was suitable for them. The researcher who was the teacher of the students too, explained the meaning of sections in details in order to make them clear by the students. According to the pre-test results 5 vocabularies which were generally known by the students, were discarded. The left 20 vocabulary which were not known by the students, were selected to be learnt. After administering the pre- test, the treatment process started and lasted for 6 lessons. After that a post- test was administered to the experimental and control group to check their learning. The post-test was the same with the pre- test. 10 days later after giving the post- test, a delayed

post –test was administered to the both groups. The researcher aimed at to find out whether the students' vocabulary learning was permanent or not by giving a delayed post- test.

3.5.1. Grouping procedures

Before the treatment the researcher assigned the students to 4 groups. Rather than just putting students in groups, the researcher followed a teambuilding process. Teambuilding process means groups of students according to their academic ability, gender and ethnicity. The researcher grouped the students, heterogeneously. The main reason for forming the heterogeneous group but not the homogeneous group is because it produces the greatest chances for peer tutoring and support as well as improving racial integration (Kagan, 1994). Following the grouping students, the students were placed in square seating design. By square seating they were able to have face to face interaction. After placing the groups the researcher specified the academic objectives of the lessons and explained the academic task that students would deal with during the treatment process.

3.5.2. Teaching procedures

3.5.2.1. Experimental group

The treatment began with the instruction for the students in experimental group pertaining jigsaw method. The jigsaw method is one of the important elements of cooperative learning. Jigsaw is a cooperative learning method which is designed to assist students to master quite large amounts of content through talking and sharing information (Coelho, 1992). The researcher explained that the jigsaw method consisted of an expert and an original group.

The short story 'Sister Love' was divided into five parts by the researcher. The original groups were separated into expert groups to work on parts of short story. The expert groups were then formed by assigning the numbers one, two, three, and four to the original group members. Each original group had a person assigned the number one, the number two and so forth.

Each group was responsible for one of the parts of the story. The researcher stated that each member of the original group would be an expert on the four parts. The students' roles both in expert and original groups were explained in details by the teacher. Following the explanation, the students started reading their own parts. The students were asked to underline and work on some of the vocabulary that they did not know. 60 minutes was left for reading. During these 60 minutes the students collaborated and completed their reading task and discussion on their part. They studied on vocabulary and found their dictionary definitions. Then the students return to their original groups from their expert groups. The students coming from the experts groups were responsible for teaching their reading part to the other group members of their own original groups. Owing to experts explanations the all members of original groups could reach the total story. Following the peer teaching, the researcher gave the students a comprehension questions worksheet about the story. 10 minutes left for the activity. The each group worked on the questions and wrote their answers down. All the groups gave correct answers which meant they griped the story. Following the comprehension questions the researcher announced that the groups would have 4 vocabulary activities. Before administering the first activity, the researcher assigned different roles to the group members. Kagan (1989) indicated that role assignment for each group member in cooperative learning context is another major feature that distinguishes cooperative learning from regular group learning. By assigning different roles to the members of each group, the researcher aimed at to structure group work so that everyone had a part to play. The roles also made a contribution for positive interdepence among students in each group.

The roles were summarizer, recorder, timekeeper, reporter, and checker. The researcher explained the responsibility of each role. The name of the each role was written on a piece of paper and the papers were sticked on the desks of responsible students. After that, the students worked on the first vocabulary activity. The activity was a matching activity (See the Appendix 6). In the activities, the responsibility of the students was teaching the vocabulary to their group members through peer teaching. The students were aware of the positive interdepence and individual accountability for the success of their own group. During the activities the researcher acted as a facilitator rather than the one who gave information. Instead of listening passively to the teacher's bilingual explanation of the vocabulary, the students learned the vocabulary in a student-centred manner, which required plenty of students' active involvement, participation, and responsibility. In the experimental group class the researcher was not the primary source of the learning. The students were the primary source of learning. They were all responsible of their own learning. In the following classes the students were administered the other vocabulary activity. While the groups were working on the activities, the researcher circulated around the room, and assisted some of them groups

that were facing some problems. In the last section of the treatment process, the researcher administered a self evaluation and a group evaluation form to the each student to get some feedback about the treatment process.

3.5.2.1.1. Students' Comments on Cooperative Learning

In the experimental process, researcher applied an evaluation form on cooperative learning activities to students. According to the students' comments on students' evaluation form on cooperative learning group activities; most of the students stated that they contributed their ideas and information. They asked others for their ideas and information. The students also stated that, they summarized all their ideas and information during group activities. The students' comments revealed that, they made sure everyone in their group understood how to do the school work they were studying. Moreover they stated that they helped keep the group on task and they included everyone in their work.

The findings from students' comments on their group work showed that, all the students got a chance to help when they need and they stated that they listened carefully to each other's ideas. Furthermore they also stated that, they asked for clarification when they did not understand and answer or a question and they appreciated their friends' ideas when they were good. Moreover all the students thought that all the group members were good at their group roles.

Students' comments showed that cooperative learning activities were successful and they also revealed that the experiment process was successful too.

3.5.2.2. The control group

In the control group, traditional teaching method was followed. The researcher was the source of learning. As a contrast to the student- centred classroom in the experimental group, the teacher was the authority in the control group. The teaching style was highly teacher- driven in the control group. In the control group the researcher usually stood in front of the class, while the students sat facing to board. The researcher announced the students that she would start the lesson with reading a story. The book of 'Reading Circles' was used in the control class as it was same in the experimental class. The story was the same one which was read in the experimental group. The researcher read the story aloud and the students followed the researcher from their books. After reading the story, the researcher asked some comprehension questions to the students. The students responded the questions as possible as they could. Following the comprehension questions the researcher wrote 20 vocabularies which were chosen from the story on the board. After that, the researcher wrote the meaning of them on the board and explained them to the students. The students listened passively to the teacher's bilingual explanation of the vocabulary. Then the researcher continued with the vocabulary activities phase. The time left for the vocabulary activities was the same as in the experimental group. The students worked on the activity individually. During the lessons the researcher dominated the whole activity and the process. The students got the information directly from the researcher when they were face with some problems about the activity. After administering the all vocabulary the researcher closed up the lesson.

3.6. Data Analysis

Quantitative data in this study was analysed with SPSS (Statistical Packages for Social Sciences), Base 13.0 except interview data.

In SPSS the data coding process, each student's responds in the control and experimental group, were coded for the each student one by one. Each item in achievement test has been coded from 1 to 6 grading. The wrong responses of the students have been coded as 9. The code of 9 was assigned by the researcher for the analysis. In this process, it is important to evaluate students' responds reliably. In order not to cause any reliability problems, the achievements tests of the students were evaluated by two English teachers and a research expert.

The analysis of data was carried out with a range of different aspects. In the process of analysing quantitative data, the primary step was to determine whether the data was appropriate for parametric or nonparametric tests. In this study, the data didn't have the parametric test's characteristics.

Non parametric tests were used for quantitative analysis. Non parametric test statistics do not depend on form of underlying population distribution and use ordinal and nominal level data. Non parametric procedures are advantageous in that they can be used with data was originally interval as such data can be down-graded to the ordinal level. They make fewer and less stringent assumptions and therefore are more widely applicable and can be applied when sample sizes are rather small, where assumptions of normality could not be sustained (Burns&Burns 2008, 256; Asthana&Bhushan 2007, 188). Twenty students for each group were the subjects of the study and in this study the population of the sample showed that, this study was appropriate for non parametric test. One of the big advantages of non parametric tests is that they do not require data to be normally distributed. Non parametric tests use ranks of the observations to compare medians rather than means. This removes the need for data to be normally distributed (Baran&Warry 2008, 50). The Kolmogorow-Smirnov test and Shapiro-Wilk test compare the scores in the sample to a normally distributed set of scores with the same mean and standard deviation. If the test is non-significant (p>.05) it tells us that the distribution of the sample is not significantly different form a normal distribution (i.e. it is probably normal). If, however, the test is significant (p < .05) then the distribution in question is significantly different from a normal distribution (i.e. it is non-normal) (Field 2009, 144). As it seen in the Appendix 4 data had not a normal distribution. For descriptive analysis, the median has been used. In order to check whether there were significant differences of vocabulary knowledge, Mann Whitney U and the Wilcoxon tests have been used. In qualitative analysis, the content analysis method has been used.

In this section, methodology of research was explained in details. Research design, procedures for grouping students, instruments, data analysing techniques were mentioned.

PART 4 FINDINGS & DISCUSSION

4.1. Introduction

This chapter presents the results of the vocabulary learning by using cooperative learning method through an achievement test (pre-test, post-test and delayed post-test). Along with the results and research questions, discussion is made with reference to some relevant studies.

4.2. Achievement of Learning Vocabulary

In this part of the study, the results of pre-test, post-test, and delayed post- test scores between the control and experimental groups, were compared using some statistical methods. By comparing the results of two groups, the researcher aimed at aimed to reach whether the cooperative learning has an impact on vocabulary learning or not. In addition to this, it is aimed to determine the differences of students' achievement levels by comparing each student's pre/post/delayed post tests results with the other students' in both control and experimental group.

4.2.1. Comparison pre-test scores of experimental group and control group according to achievement of learning vocabulary

In this phase of the study, the pre-test results of control and experimental groups were compared in order to measure students' equivalence level before the experiment and to find out whether the two groups have any differences in their vocabulary knowledge levels.

Table 4. Ranks- Comparison pre-tes	t scores of experir	mental group and	d control group	according
to achie	vement of learnin	ig vocabulary		

	Group	Ν	Mean Rank	Sum of Ranks	Median
PRETEST	Experimental	20	19,25	385,00	1,38
	Control	16	17,56	281,00	1,38
	Total	36			

	PRETEST
Mann-Whitney U	145,000
Wilcoxon W	281,000
Ζ	-,479
Asymp. Sig. (2-tailed)	,632
Exact Sig. [2*(1-tailed Sig.)]	,648(a)
a Not corrected for	ties

 Tablo 5. Mann-Whitney U Test Statistics(b)- Comparison pre-test scores of experimental group and control group according to achievement of learning vocabulary

a Not corrected for ties. b Grouping Variable: group

According to pre-test results of both groups, there is no significance difference in test achievements of both groups (U=145,0; p>.05). Median of both groups were equal (Median of experimental group test=Median of control group test =1, 38). It was seen that, both group had similar vocabulary knowledge level towards to vocabulary on pre-test and this level was between "I don't remember having seen this word before.", "I have seen this word before, but I don't know what it means."(Appendix 2)

4.2.2. Comparison post-test scores of experimental group and control group according to achievement of learning vocabulary

In this part, an evaluation was made by comparing post-test results of both experimental and control group. The achievement of the students after the treatment was measured and found out whether there were any differences on success of teaching and learning methods (traditional learning/cooperative learning) at the end of the treatment.

to achievement of learning vocabulary Group N Mean Rank Sum of Ranks Median

Table 6. Ranks- Comparison post-test scores of experimental group and control group according

	Group	Ν	Mean Rank	Sum of Ranks	Median
POST-TEST	Experimental	20	23,90	478,00	4,38
	Control	16	11,75	188,00	3,30
	Total	36			

	POST-TEST
Mann-Whitney U	52,000
Wilcoxon W	188,000
Z	-3,440
Asymp. Sig. (2-tailed)	,001
Exact Sig. [2*(1-tailed Sig.)]	,000(a)
a Not corrected	fortion

 Table 7. Mann-Whitney U Test Statistics(b)- Comparison post-test scores of experimental group and control group according to achievement of learning vocabulary

a Not corrected for fies. b Grouping Variable: group

According to post-test results of the groups, there was a significant difference in the score and achievement between the students in both groups. (U=52,0; p<.05). In terms of mean rank, the experimental group (23,90) had a higher mean rank in contrast to control group (11,75).

The median of the score difference between pre and post test of the control group was (3,30) while the experimental group was (4,38) which was higher than the one in the control group. This data showed that the post test results of the experimental group were significantly better than the control group. The students of experimental group were mostly between "I have seen this word before, and I think it mean xxx" and "I know this word. It means xxxx" while the students in the control group were mostly between "I haven't seen this word before, but I think it means xxx" and "I have seen this word before, and I think it mean xxx" and "I haven't seen this word before, but I think it means xxx" and "I have seen this word before, and I think it mean xxx".(Appendix 2)

As seen in the tables above, cooperative learning activities showed a positive effect on the students' achievement on vocabulary learning. The difference of the mean scores of experimental group was 23.90 which showed a significant improvement. It can be inferred from the tables above, the students in control group with traditional method were partially successful while the students in the experimental group with cooperative learning were successful. The high scores of the experimental group in contrast to control group, was consistent with the aim of the study. The cooperative learning used in the experimental group had a direct effect on the success of the experimental group. 4.2.3. Comparison delayed post-test scores of experimental group and control group according to achievement of learning vocabulary

In this phase of the study, by comparing students' delayed post-test results in the control and the experimental group, an evaluation was done on whether the vocabulary learning of the students was permanent or not after the treatment. The delayed post-test results also showed whether there was a significant difference on the success of both methods, traditional and the cooperative learning.

 Table 8. Ranks- Comparison delayed post-test scores of experimental group and control group according to achievement of learning vocabulary

	Group	Ν	Mean Rank	Sum of Ranks	Median
POST-TEST	Experimental	20	23,45	469,00	4,53
	Control	16	12,31	197,00	3,33
	Total	36			

Tablo 9. Mann-Whitney U Test Statistics(b)- Comparison delayed post-test scores of experimental group and control group according to achievement of learning vocabulary

	DELAYED
	POSTTEST
Mann-Whitney U	61,000
Wilcoxon W	197,000
Z	-3,154
Asymp. Sig. (2-tailed)	,002
Exact Sig. [2*(1-tailed Sig.)]	,001(a)
a Not corrected for	or ties.

b Grouping Variable: group

As seen in the above table, there was a significant difference on test achievement between the control and experimental groups (U=61,0; p<.05). In terms of mean rank of the groups, the experimental group had a higher mean rank (23,45) than the control group had (12,31). In addition to the high mean rank of the experimental group, the experimental group had a higher median (4,53) than the control group had (3,33). The delayed post-test results of the both group, indicated that the students in the experimental group did better in the delayed pos-test than the students in the control group. The students of the experimental group generally were in between the "I have seen this word before, and I think it mean xxx" and "I know this word. It means xxxx" while the students of the control group were generally in between "I haven't seen this word before, but I think it means xxxx" and "I have seen this word before, and I think it mean xxx" (Appendix 2).

The aim of applying delayed post- test to the students some time after the post test was to find out whether the vocabulary learning of the students was permanent or not. The delayed post-test results of the both groups showed that the vocabulary learning of the students was permanent in both groups. It can be inferred from the results that permanent vocabulary learning was achieved. However the achievement degree was different in both groups. The data in delayed post-test showed that the cooperative learning method had a superior effect on permanent vocabulary learning than the traditional method.

4.2.4. Comparison pre-test, post-test and delayed post-test scores of experimental group and control group according to achievement of learning vocabulary

In this part of the study, each test scores of the students was analyzed for each group. By analysing each test scores, each group success was evaluated before, during and after the treatment.

4.2.4.1. Comparison pre-test, post-test and delayed post-test scores of experimental group according to achievement of learning vocabulary

	T N	Rank	Ranks
Negative Ranks	0(a)	,00	,00
Positive Ranks	20(b)	10,50	210,00
Ties	0(c)		
Total	20		
Negative Ranks	4(d)	10,88	43,50
Positive Ranks	13(e)	8,42	109,50
Ties	3(f)		
Total	20		
	Positive Ranks Ties Total Negative Ranks Positive Ranks Ties Total	Positive Ranks20(b)Ties0(c)Total20Negative Ranks4(d)Positive Ranks13(e)Ties3(f)Total20	Positive Ranks20(b)10,50Ties0(c)Total20Negative Ranks4(d)10,88Positive Ranks13(e)8,42Ties3(f)Total20

Table 10. Ranks - Comparison pre-test, post-test and delayed post-test scores of experimental group according to achievement of learning vocabulary

b POSTTEST > PRETEST

c POSTTEST = PRETEST

d DELAYEDPOSTTEST < POSTTEST

e DELAYEDPOSTTEST > POSTTEST

f DELAYEDPOSTTEST = POSTTEST

	POSTTEST - PRETEST	DELAYEDPOSTTEST - POSTTEST
Z	-3,920(a)	-1,565(a)
Asymp. Sig. (2- tailed)	,000	,118

Table 11. The Wilcoxon Test Statistics(b) - Comparison pre-test, post-test and delayed post-test scores of experimental group according to achievement of learning vocabulary

a Based on negative ranks.b Wilcoxon Signed Ranks Test

Based on the data in table 11, for the experimental group, there was a significant difference between the pre-test and post- test results (Z=3,920; p<.05); but there was not a significant difference between the post-test and delayed post- test results. According to mean rank scores in table 11, the experimental group had a positive vocabulary learning achievement after the cooperative learning based treatment and the delayed post- test results showed this vocabulary learning was permanent.

4.2.4.2. Comparison pre-test, post-test and delayed post-test scores of control group according to achievement of learning vocabulary

			Mean	Sum of
		Ν	Rank	Ranks
POSTTEST - PRETEST	Negative Ranks	0(a)	,00,	,00
	Positive Ranks	16(b)	8,50	136,00
	Ties	0(c)		
	Total	16		
DELAYEDPOSTTEST - POSTTEST	Negative Ranks	6(d)	5,58	33,50
	Positive Ranks	9(e)	9,61	86,50
	Ties	1(f)		
	Total	16		

 Table 12. Ranks - Comparison pre-test, post-test and delayed post-test scores of control group according to achievement of learning vocabulary

a POSTTEST < PRETEST

b POSTTEST > PRETEST

c POSTTEST = PRETEST

 $d \ DELAYEDPOSTTEST < POSTTEST \\$

e DELAYEDPOSTTEST > POSTTEST

f DELAYEDPOSTTEST = POSTTEST

	POSTTEST - PRETEST	DELAYEDPOSTTEST - POSTTEST
Z	-3,517(a)	-1,506(a)
Asymp. Sig. (2- tailed)	,000	,132

Table 13. The Wilcoxon Test Statistics(b) - Comparison pre-test, post-test and delayed post-test scores of control group according to achievement of learning vocabulary

a Based on negative ranks.b Wilcoxon Signed Ranks Test

According to the data given in table 13, for the control group, there was a significant difference between the pre-test and post- test results (Z=3,517; p<.05); but there was not a significant difference between the post-test and delayed post- test results (Z=1,506; p>.05). Based on the mean rank scores in table 13, the control group had a positive vocabulary learning achievement after the cooperative learning based treatment and the delayed post- test results showed this vocabulary learning was permanent.

4.3. Discussion

The purpose of the study was to investigate the effects of cooperative learning on 10th grade students' vocabulary learning. This study had an experimental design including a control group and an experimental group. As an initial step, a pre-test was applied to the both groups. The pre-test consisted of 20 words chosen from a short story. The students' scores of pre- test were similar and they did not know the meanings of the given words in pre-test. In this study there were three basic research questions.

The first research question was to find out whether there was a significant difference between pre-test scores of experimental group and control group according to achievement of learning vocabulary. The findings revealed that both group had similar vocabulary knowledge level towards to vocabulary on pre-test and this level was between "I don't remember having seen this word before.", "I have seen this word before, but I don't know what it means." (Appendix 2).

During the treatment phase, the students in control group had the instruction with traditional teaching method, while the students in experimental group had it with a Jigsaw II technique of cooperative learning method. It is a well known fact that both teaching methods have positive effects on vocabulary learning process. Some studies showed that some

teaching methods have superior effects on language learning than the others. The related research revealed that cooperative learning had better results on students' language learning outcomes contrary to the traditional teaching method. A recent study conducted by Chen(?) had also some supportive results on superior effects of cooperative learning on teaching English than the effects of traditional whole class teaching method.

The second research question was; is there any significant difference between post-test scores of experimental group and control group according to achievement of learning vocabulary? According to post-test results of the groups there was a significant difference in the score and achievement between the students in both groups.(Table 6/7). The students in control group with traditional method were partially successful while the students in the experimental group with cooperative learning were successful. Although two teaching methods have positive effects on language learning, in the present study, the researcher aimed at to find out whether there was a significant difference on the effects of both methods on students' vocabulary learning levels. In order to investigate it after the two weeks treatment period, a post- test was applied to the both group to find out the students' vocabulary learning performances. According to the post- test results of each group, both methods used for vocabulary learning, had positive effects on students' vocabulary knowledge levels after the two weeks treatment. Although both methods had positive effects on the learning outcomes, the academic achievements of students in experimental group were higher than the students' academic achievements in control group. In some ways, students' post-test results might not be adequate for explaining students' academic achievements of vocabulary learning in language education. So a delayed-post test was applied to the both group two weeks after the post-test. The aim of application a delayed post-test was to investigate how much permanent was the vocabulary learning. A delayed post-test was important to understand how effective the teaching and learning process was as well as how much vocabulary retention occurred. Such a test results can make a contribution for getting more reliable data. According to the findings of delayed post-test results the students remained their vocabulary learning, there was no lost in vocabulary knowledge of both group.

Cooperative learning method had superior effect on vocabulary learning than the traditional teaching method. Similar results were found in the study conducted by Alhaidari (2006) who investigated the effects of cooperative learning on reading comprehension, vocabulary and fluency, achievement scores of students in a Saudi Arabian School. In the

study Alhaidari (2006) stated that cooperative learning can be an effective method in the classes for both teachers and students. In this study Jigsaw technique which is one of the important techniques of cooperative learning method was used in experimental group. The post- test results of the groups revealed that Jigsaw technique had positive effects on students' academic achievement of vocabulary learning. A recent study conducted by Yılmaz Güngör (2011) had supportive findings. Yılmaz Güngör (2011) found that Jigsaw II technique can increase students' retention ability of new words learned in the French reading course. In Yılmaz Güngör's (2011) study, the students' achievements of retention of new words in control group who had traditional teaching method. The results of another study which was conducted by Meng (2010) have also some supportive effects to the present study. Meng (2010) used Jigsaw technique in reading classes and found that Jigsaw technique affected students' reading skills and their motivation towards to reading classes in a positive way.

The third research question was; is there any significant difference between pretest, post-test and delayed-post test scores of experimental group and control group according to achievement of learning vocabulary? In some ways, students' post-test results might not be adequate for explaining students' academic achievements of vocabulary learning in language education. So a delayed-post test was applied to the both group two weeks after the post-test. The aim of application a delayed post-test was to investigate how much permanent was the vocabulary learning. A delayed post-test was important to understand how effective the teaching and learning process was as well as how much vocabulary retention occurred. Such a test results can make a contribution for getting more reliable data. According to the findings of delayed post-test results the students remained their vocabulary learning, there was no lost in vocabulary knowledge of both group.

The comparison pre-test, post-test and delayed- post test scores of the experimental group according to achievement of vocabulary learning showed that the experimental group had a positive vocabulary learning achievement after the cooperative learning based treatment and the delayed post- test results (Table 10/11/12/13) showed this vocabulary learning was permanent. The control group had a positive vocabulary learning achievement after the cooperative learning based treatment and the delayed post- test results (Table 10/11/12/13) showed this vocabulary learning was permanent. The control group had a positive vocabulary learning achievement after the cooperative learning based treatment and the delayed post- test results showed this vocabulary learning was permanent. According to the findings of delayed post-test results the students remained their vocabulary learning, there was no lost in vocabulary knowledge of both group.

Although vocabulary learning was permanent in both groups, the experimental group had better vocabulary learning permanency. These findings supported the study conducted by O'Donnell (1999) who stated that cooperative learning can increase students' achievements on translation of vocabulary meaning to each other and have positive effects on students' recalling abilities of the vocabulary that they have learnt.

In the present study, an evaluation form was given to the students' in experimental group in order to get their feedback about their thoughts on cooperative learning. According to the feedback on evaluation form, students enjoyed working together and shared their ideas and information with others. Cooperative learning gave a chance to the silent students to show their performances because of the positive interdependence factor in the group. Observation of the researcher showed that the students the students were happy, excited and had fun when carrying out group works while the students in control group got easily bored. The findings of the study revealed that cooperative learning created better learning environment in contrast to the traditional teaching method. A study conducted by Tedesco (1999) had similar findings. Tedesco stated that when students become responsible to each other, accountability for performance and behaviour is shared by the students the walls between teacher and students melt away.

In this study the students raised two way responsibilities. They gained both individual and group responsibility. With the help of positive interdependence, and individual accountability each student worked for the ultimate goal of their own group. On the other hand, students in control group only worked for their own sakes. Individual gain was dominant among the students in control group which caused mostly high achievers students got benefits from the learning. In both classes teacher sometimes needed to do some revision to check students understanding. In experimental group the students asked some questions to both the teacher and their friends when they were confused for learning new words. The interaction was between the students to students and students to teacher or teacher to the students while the interaction mostly one way teacher to students or students to teacher. While checking students understanding of the control group, the teacher asked questions and then called on the students who raised their hands. According to Kagan (1995) Whole Class Question and Answer often results in a conversation between the teacher and the brilliant students while the rest of the class remains silent. While the cooperative learning have some positive effects on language learning, it can be said that cooperative learning has promotive effects on vocabulary learning too.

A great deal of study has stated that cooperative learning can enhance language learning. The findings of this study supported the study conducted by Ekawat (2010) who stated that cooperative learning can promotes EFL students' summary writing. While the cooperative learning has some positive effects on language learning, it can be said that cooperative learning has promotive effects on vocabulary learning too.

PART V

SUMMARY, CONCLUSION AND SUGGESTIONS

5.1. Introduction

In this chapter, the researcher will start with a brief summary of the present study. Next the researcher will make a conclusion. The researcher will finally offer some suggestions as to the directions further research might take.

5.2. Summary of the Study

The purpose of the study was to investigate whether the implementation of cooperative learning (CL) activities, in the subject of English classrooms, will have an effect on students' academic achievement of vocabulary learning and recalling levels of the vocabulary. In this study, the effects of traditional teaching method were compared with the effects of cooperative learning method on vocabulary learning achievements of the students. This study was conducted in Ezine Anatolian High School, Canakkale. A total of thirty -six tenth grade students in the second semester of 2011 participated in this study. It was an experimental study. The students were purposively sampled and assigned to a control group taught by traditional teacher-fronted teaching method and to an experimental group taught by the cooperative learning method. As data collecting tools; a pre- test, post- test, a delayed -post test(VKS) and an evaluation form of students comments on cooperative learning activities were used. The study revealed that both the traditional teaching method and cooperative learning method had favourable results on vocabulary learning achievements of the students in both group. However after the treatment respondents of the experimental group showed better performance than the control group who did not show similar achievement. The experimental group outscored significantly the control group on post-test showing the supremacy of cooperative learning method over traditional learning method. Additionally, the findings from the delayed- post test showed that the recall levels of the students in the experimental group were higher than the students' recall levels of the control group. Moreover, the students' comments on cooperative learning revealed that students had positive attitudes towards cooperative learning. Hence, the ultimate result of the study indicated that cooperative learning method was more effective for vocabulary learning of English as compared to the traditional learning method.

Conclusion:

From the findings we can conclude that cooperative learning promotes students' academic achievements of vocabulary learning in English language. The students can get benefits both socially and academically from cooperative learning implementation. The Jigsaw technique of cooperative learning can help maximize the performance of the students in learning vocabulary of English. Cooperative learning method is more effective as a teaching technique for vocabulary learning than the traditional teaching method. Students in cooperative groups showed better performance in academic achievement of vocabulary learning then the students in control group.

5.3. Suggestions

In the light of the findings in this study, the following suggestions can be beneficial to make vocabulary teaching and learning process more effective.

- Many studies showed that cooperative learning has a positive effect on language learning. Since this study also has a positive effect on vocabulary learning, it might be recommended to the teachers of English in the schools of Turkey to use cooperative learning activities for teaching vocabulary so that the students can increase vocabulary knowledge.
- 2. Some studies revealed that Jigsaw II technique enhance students' vocabulary knowledge and has a positive effect on effective language teaching (Yılmaz Güngor, 2011). In this study Jigsaw II was used by the researcher. The findings of the research showed that Jigsaw II made students to have better vocabulary learning. So the more Jigsaw II technique should take part in English classes.
- 3. Since the cooperative learning has much more positive effect on language learning in contrast to traditional teaching and, the students' feedback on cooperative learning ,

was positive ,more cooperative learning activities should be used in teaching and learning process.

- 4. The recommendations of the researcher for further research include increased time for the treatment and a larger participant group. In this study, two weeks period was left for the treatment. This two weeks period limited the results of the Project. The researcher thought that, this amount of time was not enough to determine more certainty that cooperative learning would improve students' academic achievements of vocabulary knowledge. As it mentioned before this study also had a limitation for its sample group. For this study researcher collected data with a two classes with a total number of 36 tenth grade students in an Anatolian High School in a small town of Çanakkale. According to researcher, additional research should be conducted to examine whether these results are positive in a large sample, in urban, in rural, in suburban schools, and for high, average, and low achievers.
- 5. In this study only Jigsaw technique was used in cooperative learning activities. The researcher would recommend to future studies to use other cooperative learning techniques to find out their effects on students' academic achievements of vocabulary learning.
- 6. Since cooperative learning improves the students' language learning, teachers of English should be provided training in cooperative learning method. Teachers should know at least some basic elements of cooperative learning such as, positive interdependence, individual accountability or group processing in order to set better cooperative learning environment.
- In-service teachers of English in Education Faculties of Turkey should be trained in cooperative learning and training may be provided to have lessons with cooperative learning activities.
- 8. Lastly teachers using cooperative learning in their classes should be careful about the potential dangers in cooperative learning method such as social loafers or potential troublemakers gather together in one group. Teachers should ensure equal
participation of every group member in an activity; otherwise some students remain inactive while the others do all the work.

References

- Açıkgöz, Kamile. "İşbirliğine Dayalı Öğrenme Ve Geleneksel Öğretimin Üniversite
 Öğrencilerinin Akademik Başarısı, Hatırda Tutma Düzeyleri Ve Duyuşsal Özellikleri
 Üzerindeki Etkileri", A.Ü. Eğitim Bilimleri Fakültesi: I. Ulusal Eğitim Bilimleri
 Kongresi (25-28 Eylül 1990). Ankara: MEB yay. 1993. 187-201.
- Akbarian, Is'haaq. "The relationship between vocabulary size and depth for ESP/EAP learners" 2010.
- Aktas, T. "Yabanci Dil Ogretiminde Iletisimsel Yeti". *Journal of Language and Linguistic Studies, 1*(1), 2005, 89-100.
- Alhaidari, M.S. The Effectiveness of Using Cooperative Learning to Promote Reading Comprehension, Vocabulary, and Fluency Achievement Scores of Fourth- and Fifthgrade Students in A Saudi Arabian School., PhD dissertation, The Pennsylvania State University, 2006.
- Antil, L. R., J. R. Jenkins, S. K.Wayne, and P. F. Vadasy. "Cooperative learning: Prevalence, conceptualizations, and the relation between research and practice", *American Educational Research Journal*, 35, 1998, 419–54.
- Aronson, E., Blaney, N., Stephan, C., Sikes, J., & Snapp, M. *The jigsaw classroom*. Beverly Hills, CA: Sage, 1978.
- Aronson, E., & Patnoe, S. *The jigsaw classroom: Building cooperation in the classroom*. (2nded.). New York: Addison Wesley Longman, 1997.
- Aronson, E. "Building empathy, compassion, and achievement in the jigsaw classroom". In J. Aronson (Ed.), Improving academic achievement (pp. 209–225). New York: Academic Press, 2002.

- Aslandağ Soylu, Buket. İngilizce Öğretiminde İşbirlikli Öğrenme Yönteminin İlköğretim 6. Sınıf Öğrencilerinin Akademik Başarılarına Etkisi, Niğde Üniversitesi, Sosyal Bilimler Enstitüsü, 2008
- Asthana, H. S.& Bhushan, B. *Statistics for Social Sciences (with SPSS Applications)*, Prince-Hall of India Private Limited, 2007.
- Baer,1. "Grouping and achievement in cooperative learning". *College Teaching*, 51 (4),2003, 169-174.
- Balcı, Özgül; Çakır, Abdülkadir. "Teaching vocabulary through collocations in EFL Classes: The case of Turkey", *International Journal of Research Studies in Language Learning*, Volume 1 Number 1, 2012 January, 21-32
- Baran, E. & Warry, F. Simple Data Analysis for Biologists. WorldFish Center and Fisheries Administration, Phnom Penh, Cambodia, 2008.
- Biggs, J. *Teaching for quality learning at university: What the student does* (2nd Ed.) Berk Shire: Open University Press, 2007.
- Burns, R. B. & Burns, R. A. Business Research Methods and Statistics Using SPSS, Sage Publications, 2008.
- Carter, R. Vocabulary. In R. Carter, & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 42-47). Cambridge: Cambridge University Press, 2002.
- Chen, H. C. "A comparison between cooperative learning and traditional, whole-class methods--teaching English in a Junior College". *Academic Journal of Kang-Ning*, 3, 1999, 60-90.
- Coelho, E. "Jigsaw: Integrating language and content", in: C. Kessler (Ed)*Cooperative language learning. A teacher's resource book.* (Englewood Cliffs,NJ, Prentice Hall), 1992, 129-152.

- Cohen, L., Manion, L. & Morrison, K. *Research Methods in Education*, First Publication, Routledge, 2007.
- Colosi, J. C., & Zales, C. R. "Jigsaw cooperative learning improves biology lab course". *BioScience*, 48(2), 1998, 118–124.
- Cooper, J., Prescott, S., Cook, L., Smith, L., Mueck, R., Cuseo, J. Cooperative learning and college instruction: Effective use of student learning teams. Long Beach, CA: California State University Institute for Teaching and Learning, 1990. (ERIC Document Reproduction Service No. ED348920)
- Çelik, Serkan; Veli Toptaş, "Vocabulary learning strategy use of Turkish EFL learners".
 <u>Procedia Social and Behavioral Sciences</u>, Telling ELT Tales Out of School, <u>Volume</u>
 <u>3</u>, 2010, 62–71.
- Doymuş, K., Şimşek, U. Ve Şimşek, Ü. "İşbirlikli Öğrenme Yöntemi Üzerine
 Derleme: I. İşbirlik Öğrenme Yöntemi ve Yöntemle İlgili Çalışmalar", Erzincan
 Eğitim Fakültesi Dergisi Cilt: (7) Sayı: (1). 2005.
- Doymus, K. "The effect of a cooperative learning strategy in the teaching of phase and one component phase diagrams". *Journal of Chemical Education*, 84(11), 2007, 1857–1860.
- Draskovic, I., Holdrinet, R., Bulte, J., Bolhuis, S., & van Leeuwe, J. "Modeling small group learning". *Instructional Science*, 32, 2004, 447-473.
- Duin, A., & Graves, M. F. "Intensive vocabulary instruction as a prewriting technique". *Reading Research Quarterly*, 12, 1987, 311-330.
- Ekawat, Wichitra S. Effects of Cooperative Learning on EFL University Student SummaryWriting, Master of Arts Degree in Teaching English, Srinakharinwirot University, 2010.

Field, A. Discovering Statistics Using SPSS, Third Edition, Sage Publication, 2009.

Folse.K.S. Vocabulary myths. Ann Arbor, MI: University of Michigan Press, 2004.

- Galton, M. "Continuity and progression in science teaching at key Stages 2 & 3". *Cambridge Journal of Education*, 32, 2002, 249–264.
- Gillies, R. "The behaviours, interactions, and perceptions of junior high school students during small-group learning". *Journal of Educational Psychology*, 95, 2003a, 137-147.
- Gillies, R., & Ashman, A. "Behavior and interactions of children in cooperative groups in lower and middle elementary grades". *Journal of Educational Psychology*, 90, 1998, 746-757.
- Gillies, R.M. "Teacher's and students' verbal behaviours during cooperative and small-group learning". *British Journal of Educational Psychology*, 76, 2006, 271-287.
- Gillies, Robyn M.; Michele Haynes. "Increasing explanatory behaviour, problem-solving, and reasoning within classes using cooperative group work", Springer Science+Business Media B.V. 2010.
- Hatim, Ali. "A comparison of cooperative learning and traditional lecture methods in the project management department of a tertiary level institution in Trinidad and Tobago". *Caribbean Teaching Scholar*, Vol. 1, No. 1, April 2011, 49-64
- Harkins, Stephan, & Richard E. Petty, "The effects of task difficulty and task uniqueness on social loafing". *Journal of Personality and Social Psychology*, 43, 1982, 1214–1229.
- Harley, B. "Introduction: Vocabulary learning and teaching in a second language". *The Canadian Modern Language Review*, *53* (1), 1996, 3-12.

Harmer, Jeremy. The Practise of English Language teaching, Longman, 1993

- Hatch, E., & Brown, C. Vocabulary, semantics, and language education, Cambridge: Cambridge University Press, 1995.
- Hedeen, T. "The reverse jigsaw: A process of cooperative learning and discussion". *Teaching Sociology*, 31(3), 2003, 325–332.
- Hirsh, D., & Nation, P. What vocabulary size is needed to read unsimplified texts for pleasure? *Reading in a Foreign Language*, 8(2), 1992, 689-696.
- Hismanoglu, Murat. "Semiotic Elements and Difficulties in Teaching Vocabulary Items" in *International Journal of Applied Semiotics*. Vol 5, No.1-2, 2006, 121-136.
- Hişmanoğlu, Murat. "Semiotic Elements And Difficulties In Teaching Vocabulary Items". http://dergiler.ankara.edu.tr/dergiler/27/752/9598.pdf. Access Date: 07.04.2012
- Holliday, Dwight C. "Jigsaw IV: Using Student/Teacher Concerns to Improve Jigsaw III", (ERIC Document Reproduction Service No. ED495687). Retrieved from ERIC database, 1995.
- Hrepic, Z., Zollman, D. A., & Rebello, S. N. "Comparing students and experts" understanding of the content of a lecture". *Journal of Science and Educational Technology*, 16(3), 2007, 213-224.
- Huck, Kelly Renee. Vocabulary Instruction In Four Middle School Content Classrooms: A Case Study. _Master of Education (MEd), Bowling Green State University, Reading, 2006.
- Ingham, A., Levinger, G., Graves, J., & Peckham, V. "The Ringelmann effect: Studies of group size and group performance". *Journal of Personality and Social Psychology*, 10, 1974, 371–384.
- Isik, A. "Yabanci Dil Egitimimizdeki Yanlislar Nereden Kaynaklaniyor?". *Journal of Language and Linguistics*, 4(2), 2008, 15-26.

- Jackson, S.L. *Research Methods: A Modular Approach*, Second Edition, Wadsworth/Cengage Learning, USA, 2011.
- Johnson, D.W., & Johnson, R.T. "Cooperative learning and achievement", In S. Sharan (Ed.), *Cooperative learning: theory and research* (pp.23-37). New York: Praeger. 1990a.
- Johnson, D. W., &Johnson, R. T. Learning together and alone: Cooperative, competitive, and individualistic learning (4th ed.). Boston: Allyn & Bacon, 1994.
- Johnson, D.W., Johnson, R.T., "An overview of cooperative learning". In: Thousand, J., Villa, A., Nevin, A. (Eds.), *Creativity and Collaborative Learning*. Brook Press, Baltimore, 1994, 1–20.
- Johnson, D. W., Johnson, R. T., & Smith, K. A.. "Cooperative learning and individual student achievement in secondary schools". InJ. E. Peder-sen & A. D. Digby (Eds.), *Secondary schools and co-operative learning* (pp. 3-54). New York: Garland. 1995
- Johnson, D. & Johnson, R. *Cooperative learning and social interdependence theory: Cooperative learning.* www.co-operation.org/pages/SIT.html, 1998
- Johnson, D., Johnson, R.& Holubec, E. *Cooperation in the classroom*. Boston: Allyn and Bacon. 1998.
- Johnson, D. W., & Johnson, R. T. *Learning together and alone: Cooperative, competitive and individualistic learning* (5th ed.). Boston: Allyn and Bacon, 1999a.
- Johnson, D. W., & Johnson, R. T. "What Makes Cooperative Learning Work". In D. Kluge,
 S. McGuire, D. Johnson & R. Johnson (Eds.), *JALT Applied Materials: Cooperative Learning*. Tokyo: Japan Association for Language Teaching, 1999b.
- Johnson, D., & Johnson, R. "Learning together and alone: overview and metaanalysis". *Asia Pacific Journal of Education*, 22, 2002.

- Jones, Karrie A. and Jennifer L. Jones. "Making Cooperative Learning Work in the College Classroom: An Application of the 'Five Pillars' of Cooperative Learning to Post-Secondary Instruction". *The Journal of Effective Teaching*, Vol. 8, No. 2, 2008, 61-76.
- Kagan, S. "The structural approach to cooperative learning". *Educational Leadership*, December, 1989.
- Kagan, S. *Cooperative Learning*. San Juan Capistrano, CA. Kagan Cooperative Learning. 1992.
- Kagan, S. 'We can talk: Cooperative learning in the elementary ESL classroom'. *Elementary Education Newsletter*, 17/2: 1995, 3–4.
- Kern, Anne L., Tamara J. Moore, and F. Caglin Akillioglu. "Cooperative Learning: Developing an Observation" *Instrument for Student Interactions*, October 10 – 13, 2007, Milwaukee, WI, http://fie-conference.org/fie2007/papers/1107.pdf
- Kerr, N., & Bruun, S. "Ringelmann revisited: Alternative explanations for the social loafing effect". *Personality and Social Psychology Bulletin*, 7, 1981, 224–231.
- Keyser, Marcia W. "Active Learning and Cooperative Learning: Understanding the difference and using both styles effectively". Texas A&M University-Kingsville, http://escholarshare.drake.edu/bitstream/handle/2092/251/Keyser%23251.pdf?sequenc e=1, Acces Date: 07.04.2012
- Kızıldağ, Ayse. "Teaching English in Turkey: Dialogues with teachers about the challenges in public primary schools" *International Electronic Journal of Elementary Education Vol.1, Issue 3, June, 2009.*
- Kojic-Sabo, Izabella, Patsy M. Lightbown. "Students' Approaches to Vocabulary Learning and Their Relationship to Success". *The Modern Language Journal* volume 83 issue 2, 1999, 176-192.

- Konig, Güray Çağlar. "The Place of English in Turkey". Deniz Bozer (Ed.), The Birth and Growth of a Department: Department of English Language and Literature: 25th Anniversary, (Ankara, Hacettepe University, 1990): 157-67.
- Latane, B., Williams, K., & Harkins, S. "Many hands make light the work: The causes and consequences of social loafing". *Journal of Personality and Social Psychology*, 37, 1979, 822–832.
- Laufer, B., & Hulstijn, J. "Incidental vocabulary acquisition in a second language: The construct of task-induced involvement". *Applied Linguistics*, *22*, 2001, 1-26.
- Lehtonen, T. H. *Consciousness raising in foreign language vocabulary learning and reading*. EdD Thesis, University of Leeds, 1998.
- Liang, Tsailing. Implementing Cooperative Learning In Efl Teaching: Process And Effects, the Degree of Doctor of Philosophy, The Graduate Institute of English, National Taiwan Normal University, 2002.
- Lou, Y., Abrami, P.C., Spence, J.C., Paulsen, C., Chambers, B., & d'Appollonio, S. "Withinclass grouping: A meta-analysis", *Review of Educational Research*, 66(4), 1996, 423-458.
- Malin, Greg. A study of the impact of cooperative small group facilitated case studies on student learning outcomes, September 2007.
- Mbaya, Maweja. "The spread of the English language in the French-speaking countries of Africa: the case of Senegal". J. Humanit. (Zomba), 15, 2001
- McBurney, D. H. and White, T. L. *Research Methods Eight Edition*, Wadsworth, Cengage Learning, USA, 2009.
- McDonell, W. "The role of the teacher in the cooperative learning classroom". In C. Kessler (Ed.), Cooperative language learning: *A teacher's resource book* (pp.163-174). Englewood Cliffs, NJ: Prentice Hall, 1992.

- McGroarty, M. (1989). "The benefits of cooperative learning arrangements in second language acquisition". *NABE Journal*, 13 (2), 127-43.
- Meng, J. Jigsaw Cooperative Learning in English Reading, *Journal of Language Teaching* and Research, Vol. 1, no. 4, 2010, 501-504
- Moede, W. "Die richtlinien der leistungs-psycholgie". *Industrielle Psychotechnik, 4*, 1927, 193–207.
- Morin, R. & Goebel, J. "Basic vocabulary instruction teaching strategies or word?". *Foreign Language Annuals, 34* (1), 2001.
- Nation, I. S. P. *Learning vocabulary in another language*. Cambridge: Cambridge University Press, 2001.
- Norris, J. M. & Ortega, L. . Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, *50*, 2000, 417-528.
- O'Donnell, A.M. Structuring dyadic interaction through scripted cooperation. In A. M. O'Donnell & A. King, (eds.), *Cognitive Perspectives on Peer Learning* (pp. 179-196). New Jersey: Lawrence Erlbaum Associates, 1999.
- Oguz, E. İlköğretimde Yabancı Dil (İngilizce) Öğretimi Sorunları (The Problems of foreign language (English) teaching in elementary schools). Unpublished Master Thesis. Kocaeli University: Kocaeli, Turkey 1999.
- Olsen, R. and S. Kagan. 'About cooperative learning' in C. Kessler (ed.). *Cooperative Language Learning: A Teacher's Resource Book*. Englewood Cliffs, N.J.: Prentice Hall. 1992.
- Orogbu, Jessica. "Traditional Teaching vs. Constructivism", *International Referred Research Journal*, ISSN- 0974-2832 VoL.II *ISSUE -18, July,2010. http://www.everydaycitizen.com/2007/09/traditional_teaching_vs_constu.html

- Oxford, Rebecca L and Martha Nyikos. "Interaction, Collaboration and Cooperation: Learning Languages and Preparing Language Teachers", *The Modern Language Journal*, Vol. 81, No. 4, 1997,482-493
- Paker, T. "Problems of teaching English in schools in Çal Region and suggested Solutions".
 21. Yüzyıla Girerken Geçmişten Günümüze Çal Yöresi: Baklan, Çal, Bekilli. Çal Yöresi Yardımlaşma ve Dayanışma Derneği Yayını, 3, 2007, 684-690.
- Paribakht, T. S., & Wesche, M. "Vocabulary enhancement activities and reading for meaning in second language vocabulary development". In J. Coady & T. Huckin (Eds.). Second language vocabulary acquisition: A rationale for pedagogy (pp. 174-200). Cambridge: Cambridge University Press, 1997.
- Petty, R., Harkins, S., Williams, K., & Latane, B. "The effects of group size on cognitive effort and evaluation". *Personality and Social Psychology Bulletin, 3*, 1977, 575–578.
- Read, J. "Towards a new collaboration: Research in SLA and language testing". *New Zealand Studies in Applied Linguistics, 13, 2007.*
- Richards, Jack C. "The Role of Vocabulary Teaching". *TESOL Quarterly*, Vol. 10, No. 1. Mar., 1976, 77-89.
- Richards, J. C. "Communicative Language Teaching Today", <u>http://www.professorjackrichards.com/pdfs/communicative-language-teaching-today-</u> <u>v2.pdf</u>, Access Date: 05.03.2012

Robinson, R. D. Helping adults learn and change. Wisconsin: Omnibook Co. 1995.

- Roessingh, Hetty. BICS-CALP: "An introduction for some, a review for others ...". SCENES newsletter, Fall 2004
- Roger T. and David W. Johnson. "An overview of cooperative learning", A. Villa and A. Nevin (Eds), *Creativity and Collaborative Learning*; Brookes Press, Baltimore, 1994.

- Rojas-Drummond, S., & Mercer, N. "Scaffolding the development of effective collaboration and learning". *International Journal of Educational Research*, 39, 2003, 99–111.
- Russell, Marcus. Observations on Cooperative-Learning Group Assignments, Department of Philosophy, Hamilton College, October 14, 2009 http://www.thatmarcusfamily.org/philosophy/Papers/groupings.pdf
- Schmitt, N. "Instructed Second Language Vocabulary Learning". *Language Teaching ResearchLanguage Teaching Research*, 12 (3), 2008, 329-363.
- Sharan, S. "Cooperative learning in teams: Recent methods and effects on achievement, attitudes, and ethnic relations". *Review of Educational Research, 50*, 1980, 241-272.
- Sharan, S. "Co-operative learning: A perspective on research and practice". In S. Sharan (Ed.), *Co-operative learning: Theory and research* (pp. 285-300). New York: Praeger 1990.
- Sharan, S., Shachar, H., & Levine, T. *The innovative school: Organization and Instruction*. Westpoint, CT: Bergin & Garvey, 1999.
- Slagle, David R. The Use of Cooperative Learning to Promote Academic Achievement, Self-Esteem, and Inter-Group Relations In a High School Social Studies Class, the Master of Arts in Education Program of Defiance College, Masters of Arts in Education, July, 2007.
- Slavin, R. E. *Using student team learning*, Washington, DC: Professional Library National Education Association, 1986.
- Slavin, R. E. *Cooperative learning: Theory, research and practice*. 2nd ed Boston: Allyn and Bacon. 1995.
- Slavin, R. E. "Neverstreaming: Preventing learning disabilities", *Educational Leadership*, 53 (5), 1996, February, 4-7.

- Southwest Consortium for the Improvement of Mathematics and Science Teaching, "Cooperative Learning", *Classroom Compass*, Volume 1, Number 2, Fall 1994. http://www.sedl.org/pubs/classroom-compass/cc_v1n2.pdf
- Stahl, Steven A. "The Effects of Vocabulary Instruction: A Model-Based Meta-Analysis", *Review of Educational Research*, Vol. 56, No. 1, 1986, 72-110.
- Stahl, Robert J. "The Essential Elements of Cooperative Learning in the Classroom. ERIC Digest" ERIC Clearinghouse for Social Studies/Social Science Education Bloomington, 1994.
- Stahl, R. J. "Cooperative Learning: A Social Studies Context and an Overview". In R. 1.
 Stahl. (Ed.), *Cooperative learning in social studies: A handbook/or teachers*. (pp. 1-17) New York: Addison-Wesley Publishing Company, 1994.
- Steinert, Y. "Student perceptions of effective small group teaching". *Medical Education,* 38(3), 2004, 286-293.
- Stockdale, S. L. & Williams, R.L. "Cooperative learning groups at the college level: Differential effects on high, average, and low exam performers". *Journal of Behavioral Education*, 13(1), 2004, 37-50.
- Suwantarathip, O., & Wichadee, S. "The Impacts Of Cooperative Learning On Anxiety And Proficiency In An EFL Class". *Journal of College Teaching & Learning (TLC)*. 7:11, 2010.
- Swain, M. & Carroll, S. "The immersion observation study". In B. Harley, P. Allen, J. Cummins, & M. Swain (Eds.) *The development of bilingual proficiency final report* (Vol. 2, pp. 190-263). Toronto: Modern Language Centre, Ontario Institute for Studies in Education, 1987.

- Tanner, K.D., L. Chatman, and D. Allen. "Approaches to biology teaching and learning: Science teaching and learning across the school–university divide—cultivating conversations through scientist–teacher partnerships". *Cell Biology Education* 2(4), 2003, 195–201.
- Tedesco, L. M. "The effects of cooperative learning on self-esteem: a literature review. Master Thesis, Dominican College of San Rafael. 1999.
- Terwel, Jan; Robyn M. Gillies; Pieter van den Eeden and Dirk Hoek. "Co-operative learning processes of students: A longitudinal multilevel perspective", *British Journal of Educational Psychology*, 71, 2001, 619-645

Thornbury, Scott. How to Teach Vocabulary, Longman; First Edition, 2002.

- Tilfarlioglu, F. Y. & Ozturk, A. R. An Analysis of ELT Teachers' Perceptions of Some Problems Concerning the Implementation of English Language Teaching Curricula in Elementary Schools. *Journal of Language and Linguistic Studies*, 3(1), 2007, 202-217.
- Tok, S. "Effects of cooperative learning method of pairs check technique on reading comprehension". *Elementary Education Online*, 7(3), 2008, 748-757.
- Trochim, W. M. K. And Donnelly, J. P. *Research Methods Knowledge Base*, Third Edition, Cengage Learning, 2006.
- Turner, J., Midgley, C., Meyer, D., Gheen, M., Anderman, E., Kang, Y., et al. "The classroom environment and students' reports of avoidance strategies in mathematics: A multimodal study". *Journal of Educational Psychology*, 94, 2002, 88–106.

Ur, Penny. 1996. 1996. A Course in Language Teaching. Cambridge: CUP.

Vygotsky, L. Mind in Society. Cambridge, MA: Harvard University Press, 1978.

Wallace, M. Teaching Vocabulary. Chicago: University of Chicago Press, 1988.

Wallace, M.C. Action research for Language Teachers. Cambridge University Press, 1998.

- Wang, Tzu-Pu. "The Comparison of the Difficulties between Cooperative Learning and Traditional Teaching Methods in College English Teachers", *The Journal of Human Resource and Adult Learning* Vol. 3, Num. 2, December 2007.
- Webb, N.M. Group collaboration in assessment: Competing objectives, processes and outcomes. Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing, 1993. (ERIC Document Reproduction Service No. ED376215)
- Webb, N., & Farivar, S. "Developing productive group interaction in middle school mathematics". In A. O'Donnell, & A. King (Eds.), *Cognitive perspectives on peer learning* (pp. 117-150). Mahwah, NJ: Lawrence Erlbaum, 1999.
- Wesche, M., & Paribakht, T. S. "Assessing second language vocabulary knowledge:Depth versus breadth". *The Canadian Modern Language Review*, *53*,1996,13–40.
- Williams, K. "The effects of group cohesiveness on social loafing". Paper presented at the annual meeting of the Midwestern Psychological Association, Detroit, 1981.
- Williams, K., Harkins, S., & Latane, B. "Identifiability as a deterrent to social loafing: Two cheering experiments". *Journal of Personality and Social Psychology*, 40, 1981, 303– 311.
- Yıldız, V. İşbirlikli Öğrenme Ve Geleneksel Öğretimin Okul Öncesi Çocuklarının Temel Matematik Başarıları Üzerindeki Etkileri Ve Mevcut Uygulamalarla İlgili Öğretmen Görüşleri. Yayınlanmamış Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi,İzmir, 1998.
- Yılmaz Güngör, Zühre. "Effect Of Jıgsaw-II On The Retention Of New Words Learned In The Course Of Reading In French", *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 13, 4, 2011, 75-84
- Zacharia, Zacharias C., Nikoletta A. Xenofontos, Constantinos C. Manoli, *The effect of two* different cooperative approaches on students' learning and practices within the context of a WebQuest science investigation, Association for Educational Communications and Technology 2010

APPENDIXES

Experimental Group		
Student's No	English Lesson	
	Mark	
E1	49	
E2	60	
E3	60	
E4	65	
E5	65	
E6	68	
E7	75	
E8	85	
E9	70	
E10	80	
E11	78	
E12	58	
E13	60	
E14	65	
E15	60	
E16	67	
E17	66	
E18	65	
E19	60	
E20	44	
Mean of E.	65,00	
Group Marks	-	

Appendix 1. Experimental and Control Groups Students' English Lesson Marks

Control Group		
Student's No	English Lesson	
	Mark	
C1	58	
C2	62	
C3	85	
C4	67	
C5	55	
C6	60	
C7	76	
C8	60	
С9	65	
C10	70	
C11	60	
C12	81	
C13	49	
C14	62	
C15	67	
C16	45	
C17	68	
C18	72	
C19	65	
C20	65	
Mean of C.	64,60	
Group Marks		

Appendix 2. The Academic Vocabulary Knowledge Scale

Name-Su	rname:			• • • • • • • • • • • • • • • •
Number:				
Class:				
Date:	•••••	•••••	•••••	•••••

DIRECTIONS: According to the 6 scales of vocabulary knowledge, please circle one item fort he target word based on the descriptions of the "category" section, and supply with some extra information by blank filling.

For example:

A.	Concept	
	Item	Category
	I.	I don't remember having seen this word before.
	II.	I have seen this word before, but I don't know what it means.
	III.	I haven't seen this word before, but I think it means
		<u></u> .
	IV.	I have seen this word before, and I think it mean
		(synonmy or translation)
	V.	I know this word. It means <i>idea</i> , or <i>fikir</i> . (synonmy or translation)
	(V)	I can use this word in a sentence: She presented an innovative concept in her
		term paper. (If you do this section, please also do section V.)

B. <u>assume</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
(IV)	I have seen this word before, and I think it mean speculate . (synonmy or
\cup	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence:
	(If you do this section, please
	also do section V.)

<u>.....</u>

<u>.....</u>

1. <u>tile</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

2. good looking

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

3. <u>shy</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

4. <u>wine</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	<u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

5. <u>hill</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

6. <u>horn</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

7. <u>toot</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	<u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

8. <u>roof</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	<u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

9. <u>suntan</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

10. <u>edge</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	<u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

11. <u>slip away</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

12. <u>church</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	<u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

13. <u>coat</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
IV.	I have seen this word before, and I think it mean
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence:

14. <u>slippery</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	<u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

15. <u>perhaps</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

16. suddenly

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

17. <u>usual</u>	
Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

18. <u>around</u>

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

19. asleep

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u> .
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

20. wave

Item	Category
I.	I don't remember having seen this word before.
II.	I have seen this word before, but I don't know what it means.
III.	I haven't seen this word before, but I think it means
	. <u></u>
IV.	I have seen this word before, and I think it mean
	translation)
V.	I know this word. It means (synonmy or translation)
VI.	I can use this word in a sentence: (If you
	do this section, please also do section V.)

Appendix 3 - Sample Lesson Plans

Appendix 3.1. Sample lesson plan—Experimental group

Subject Area: Vocabulary teaching

Lesson Summary:

Divide the reading selection 'Sister Love' into four parts. A,B,C and D

Assign a part for each student.

Have students who were assigned the same part form expert teams to discuss their assigned readings, using the worksheets.

Students turn to their group and give information about their part to the other group members.

Students give meaning of certain vocabulary words after guessing them from context clues.

They generate ideas through brainstorming and free talking in groups and match 15 words with appropriate meaning.

Students complete the passage with the given words.

Instructional Objectives:

Students should be able to:

- 1. Generate ideas and give meaning of certain words.
- 2. Share their knowledge of vocabulary.
- 3. Discuss the passage and needed vocabulary for completing it.
- 4. Provide information.

Cooperative learning objectives:

The students will participate in group verbal interactions.

The students will display appropriate turn-taking procedures.

The students will give reasons in support of opinions expressed.

The students will employ a group decision-making technique such as brainstorming

Decisions:

Group Size: 5 students per group

Assignment to Groups: Assign a high-, medium, and an average student to each group.

Materials: Reading Circles, Dictionary, Worksheets.

Time Required: One 45-minute period

Roles: Members will be assigned rotating roles during different activities.

For this lesson each group will have a/an:

1. Summarizer (checker) to make sure everyone in the group understands what is being learned.

2. Recorder to write down the group's decisions and to edit the group's report.

3. Encourager to reinforce members' contributions.

4. Time keeper to control the time given to their group and makes sure that the assigned task is completed in time.

5. Reporter to report the summary of his/her group's discussion to the class on behalf of his/her team.

Arranging the Room: Group members will sit in pods and be close enough to each other to communicate effectively without disrupting the other learning groups, and the teacher should have a clear access lane to every group

The Lesson

Instructional Task:

Guess the meaning of given words by getting contextual meaning of them in the story.

When you finish, review your ideas and complete the activity (Exercise 1) together.

Delegate a group member to present your work to the class.

Complete the passage with the given vocabulary.

Delegate a group member to share your answers with the class.

Positive Interdependence:

For this assignment, I want you to work cooperatively. You are to help each other do the exercises. I want just one response from your group which includes the answers to all the questions.

Individual Accountability:

You are responsible for getting the group to answer questions on your worksheet and for writing the answers down. You are also responsible for helping your group members answer their questions and get them written down. When you sign your group's paper, it means that you agree with all of the answers and can individually explain why they are correct.

Face to face interaction: Each student's participation in the small group activity is assessed by teacher and peer observation.

Interpersonal & Small Group Skills: Students demonstrate appropriate communication, collaboration, and interaction skills as assessed through observations

Criteria for Success:

If you get between eighteen to twenty vocabulary right, you are great, between fourteen to seventeen is okay. Below fourteen vocabulary right you need to work on it again.

Expected Behaviours:

- . I expect to see the following as I observe the groups:
- Stay with your group and do not wander around the room.
- Use quiet voices.
- Take turns.
- Use English to communicate.
- Make sure that all four students get a chance to help.

Checking Students' Understanding: The instructor makes students ask the meaning of vocabulary to each other. Students ask the meaning of vocabulary to their friends in their group.

Closure: End up the lesson by giving rewards to the most successful group.

Appendix 3.2. Sample lesson plan—Control group

Subject Area: Vocabulary teaching

Lesson Summary:

Students read the story 'Sister Love' individually.

Students give meaning of certain vocabulary words after guessing them from context clues. They generate ideas through brainstorming and match 20 words with appropriate meaning. Students complete the passage with the given words.

Instructional Objectives:

Students should be able to:

- 1. Generate ideas and give meaning of certain words.
- 2. Share their knowledge of vocabulary.
- 3. Discuss the passage and needed vocabulary for completing it.
- 4. Provide information.

Traditional Teaching Objectives:

The classroom will be teacher- centred. The students will study for individual gain. The students will complete the worksheet individually.

Decisions:

Materials: Reading Circles, Dictionary, worksheet

Time Required: One 45-minute period

Seating Arrangement: Students are sitting at desks in rows in which they all face the front of the class. The instructor is usually sitting or standing in front of the class.

The Lesson

Instructional Task:

Guess the meaning of given words by getting contextual meaning of them in the story. When you finish, review your ideas and complete the activity. (Exercise 1) Match the words with appropriate meanings.

Read the passage and fill in the blanks with given vocabulary words.

Interaction: Students usually interact with the instructor.

Criteria for Success:

If you get between eighteen to twenty vocabularies correct, you are great, between fourteen to seventeen is okay. Below fourteen vocabulary right you need to work on it again.

Checking Students' Understanding: The instructor asks meaning of the vocabulary to the students. The students try to answer the question by individually.

Closure

End up the lesson by giving rewards to the most successful students.

Appendix 4. Normallity Tests

	Kolmogorov-Smirnov(a)		Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.
pretest1	,437	20	,000	,401	20	,000
pretest2	,177	20	,101	,833	20	,003
pretest3	,266	20	,001	,832	20	,003
pretest4	,420	20	,000	,660	20	,000
pretest5	,307	20	,000	,768	20	,000
pretest6	,372	20	,000	,701	20	,000
pretest7	,319	20	,000	,743	20	,000
pretest8	,326	20	,000	,647	20	,000
pretest9	,527	20	,000	,351	20	,000
pretest10	,399	20	,000	,695	20	,000
pretest11	,527	20	,000	,351	20	,000
pretest12	,509	20	,000	,433	20	,000
pretest13	,336	20	,000	,748	20	,000
pretest14	,450	20	,000	,545	20	,000
pretest15	,508	20	,000	,312	20	,000
pretest16	,436	20	,000	,655	20	,000
pretest17	,228	20	,008	,850	20	,005
pretest18	,334	20	,000	,805	20	,001
pretest19	,279	20	,000	,850	20	,005
pretest20	,413	20	,000	,608	20	,000
posttest1	,413	20	,000	,689	20	,000
posttest2	,282	20	,000	,663	20	,000
posttest3	,290	20	,000	,777	20	,000
posttest4	,383	20	,000	,524	20	,000
posttest5	,354	20	,000	,758	20	,000
posttest6	,470	20	,000	,503	20	,000
posttest7	,287	20	,000	,765	20	,000
posttest8	,364	20	,000	,657	20	,000
posttest9	,351	20	,000	,706	20	,000
posttest10	,363	20	,000	,722	20	,000
posttest11	,254	20	,002	,844	20	,004
posttest12	,387	20	,000	,626	20	,000
posttest13	,485	20	,000	,500	20	,000
posttest14	,338	20	,000	,772	20	,000
posttest15	,386	20	,000	,740	20	,000
posttest16	,380	20	,000	,711	20	,000
posttest17	,354	20	,000	,757	20	,000
posttest18	,265	20	,001	,845	20	,004
positest19	,274	20	,000	,743	20	,000
positest20	,292	20	,000	,786	20	,001
dposttest?	,459	20	,000	,543	20	,000
dposttest2	,350	20	,000	,658	20	,000
dposttest3	,362	20	,000	,625	20	,000
dposttest4	,304	20	,000	,623	20	,000
aposttest5	,429	20	,000	,654	20	,000

Tests of Normality-Experimental Group

dposttest6	,485	20	,000	,500	20	,000
dposttest7	,420	20	,000	,671	20	,000
dposttest8	,381	20	,000	,601	20	,000
dposttest9	,325	20	,000	,719	20	,000
dposttest10	,419	20	,000	,641	20	,000
dposttest11	,268	20	,001	,846	20	,005
dposttest12	,487	20	,000	,495	20	,000
dposttest13	,464	20	,000	,589	20	,000
dposttest14	,294	20	,000	,803	20	,001
dposttest15	,403	20	,000	,722	20	,000
dposttest16	,411	20	,000	,728	20	,000
dposttest17	,347	20	,000	,771	20	,000
dposttest18	,447	20	,000	,598	20	,000
dposttest19	,284	20	,000	,784	20	,001
dposttest20	,328	20	,000	,773	20	,000

a Lilliefors Significance Correction

	Kolm	ogorov-Smirne	ov(a)		Shapiro-Wilk	
	Statistic	df	Sig.	Statistic	df	Sig.
pretest1	,323	16	,000	,759	16	,001
pretest2	,398	16	,000	,621	16	,000
pretest3	,318	16	,000	,678	16	,000
pretest5	,518	16	,000	,398	16	,000
pretest6	,392	16	,000	,597	16	,000
pretest7	,220	16	,038	,819	16	,005
pretest8	,323	16	,000	,759	16	,001
pretest10	,398	16	,000,	,621	16	,000
pretest11	,431	16	,000	,591	16	,000
pretest12	,332	16	,000	,581	16	,000
pretest13	,414	16	,000	,644	16	,000
pretest14	,536	16	,000	,273	16	,000
pretest15	,395	16	,000	,601	16	,000
pretest16	,339	16	,000	,642	16	,000
pretest17	,367	16	,000	,785	16	,002
pretest18	,343	16	,000	,738	16	,000
pretest19	,261	16	,005	,820	16	,005
pretest20	,518	16	,000	,398	16	,000
posttest1	,515	16	,000	,414	16	,000
posttest2	,152	16	,200(*)	,892	16	,060
posttest3	,345	16	,000,	,787	16	,002
posttest4	,294	16	,001	,715	16	,000
posttest5	,306	16	,000	,804	16	,003
posttest6	.264	16	,004	.829	16	.007
posttest7	,306	16	,000	,855	16	,016
posttest8	,319	16	,000	,814	16	,004
posttest9	.242	16	.013	.817	16	.005
posttest10	.263	16	.004	.730	16	.000
posttest11	,235	16	,018	,855	16	,016

Tests of Normality(b,c)-Control group

posttest12	,326	16	,000	,722	16	,000
posttest13	,329	16	,000	,715	16	,000
posttest14	,318	16	,000	,852	16	,015
posttest15	,373	16	,000	,788	16	,002
posttest16	,198	16	,093	,897	16	,073
posttest17	,324	16	,000	,831	16	,007
posttest18	,375	16	,000	,760	16	,001
posttest19	,177	16	,195	,916	16	,147
posttest20	,384	16	,000	,755	16	,001
dposttest1	,492	16	,000	,484	16	,000
dposttest2	,302	16	,000	,706	16	,000
dposttest3	,363	16	,000	,668	16	,000
dposttest4	,329	16	,000	,772	16	,001
dposttest5	,312	16	,000	,780	16	,002
dposttest6	,360	16	,000	,684	16	,000
dposttest7	,275	16	,002	,806	16	,003
dposttest8	,376	16	,000	,738	16	,000
dposttest9	,277	16	,002	,749	16	,001
dposttest10	,319	16	,000	,691	16	,000
dposttest11	,290	16	,001	,804	16	,003
dposttest12	,421	16	,000	,681	16	,000
dposttest13	,318	16	,000	,803	16	,003
dposttest14	,350	16	,000	,692	16	,000
dposttest15	,363	16	,000	,696	16	,000
dposttest16	,280	16	,002	,849	16	,013
dposttest17	,203	16	,077	,873	16	,031
dposttest18	,283	16	,001	,803	16	,003
dposttest19	,315	16	,000	,813	16	,004
dposttest20	,341	16	,000	,778	16	,001

* This is a lower bound of the true significance.
a Lilliefors Significance Correction
b pretest4 is constant. It has been omitted.
c pretest9 is constant. It has been omitted.

Appendix 5. Students' Evaluation Forms

Name:
Surname:
Your Group Number:

A. How Well Did I Do In Helping Our Group? (Take one into parentheses)

1. I contributed my ideas and information	Always	Sometimes	Never
2. I asked others for their ideas and information	Always	Sometimes	Never
3. I summarized all our ideas and information	Always	Sometimes	Never
4. I made sure everyone in our group understood how to do the school work we were studying	Always	Sometimes	Never
5. I helped keep the group on task	Always	Sometimes	Never
6. I included everyone in our work	Always	Sometimes	Never

B. How Well Did Our Group Do? (Take one into parentheses)

1. We made sure all of us got a chance to help	Always	Sometimes	Never
2. We listened carefully to each other's ideas	Always	Sometimes	Never
3. We said so when we did not understand an answer or question	Always	Sometimes	Never
4. We said so when we thought someone's idea was good	Always	Sometimes	Never
5. All the group members were good at on their group roles	Always	Sometimes	Never

WORD FOCUS

Complete the passage with these words. (Use one word in each gap.) church, edge, horn, roof, suntain, wave, wine, toot, suddenly

'Jes,

I know Karin and her sister Marcia very well. Mast Sundays I came to their apartment after _____, and had a glass of _____ with them. We usually sat in their _____ garden. Karin liked the sun, you see. She always wrore her bikini and lay on her sunbed in the sun. She had a wonderful _____. She's a very beatiful woman. We met everyday after church and I drove her home. I work at the hospital, you see, and Korin's shop was very near there. Yes, we are ... we wereit's very difficult. I go to church with Marcia every Sunday

Today, Marcia didn't go to church because she had a bad head. But she wanted me to come for a drink after church as usual, when I arrived, I gave three little _____ on my car _____. I always did this, and Karin always came to the _____ of the <u>roof</u> to look down and _____ to me. Today I saw her at the edge but ______ she fell cold

WORD FOCU	5
Match each word with c	in appropriate meaning.
tile	1. happening or done quickly and without warning.
good locking	2 an alcoholic drink made from grapes.
shy 🗆	3. the covening that forms the top of a building. Nehicle etc.
wine	4- wet, smooth or oily so that it slides easily.
hill	5. the state of white skin having turned brown or darker brown.
toot	6-a building for christian religious activities
roof D	7. in a position or direction surrounding.
suntan [8. a thin piece of baked cky plastic used for covering ropps, floors, walls etc.
edge	9. disappear or leave furtively.
slip away	10 the outer or furthest point of something.
church 🗀	11-nervous and uncomfortable with other people.
coat 🗆	12. happening, done or used most often
slippery	13. a pleasing or attractive appearance, handsome
usua	16 a short sound of series of
perhaps 🗀	15-an area of land that is higher than the surrounding land. 16-sleeping or not awake.
suddenly 🗌	17-to move the hand usually in a raised position as
around 🗇	a way of greening solutions which is worn over other 18-an outer piece of dothing which is worn over other
osleep	ls_a device on a vehicle that is used to make a loud noise as a warning or signal to other people.
wave	20-used to show that something is possible or
	that you are not certain about something.

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