

# COOPERATIVE LEARNING IN DEVELOPING POSITIVE ATTITUDES AND REFLECTIVE THINKING SKILLS OF HIGH SCHOOL STUDENTS' IN ENGLISH COURSE

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**Abstract:** The purpose of the study is to reveal the effect of cooperative learning on the attitudes and reflective thinking skills of the students' in English course. The study was carried out for 5 weeks with 66 students studying at the 10th grade at an Anatolian high school in the district of Karadeniz Ereğli in Zonguldak during the fall term of the 2015-2016 academic year. The design of the study was 'nonequivalent control groups pre-test post-test' which is one of quasi-experimental designs. The scale of attitude towards English course and the scale of reflective thinking were used as instruments of the study which were applied as a pre-test and as a post-test. According to the results, it was concluded that cooperative learning is significantly and positively more effective on students' attitudes and reflective thinking skills than traditional method. This study was produced from master thesis of written by first author under the supervision of second author.

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## INTRODUCTION

In present age, individuals who internalize, adapt and keep up with technological and scientific developments are more required than the ones who adopt and consume ready-made information as it is presented to them. Independent, creative, self-confident individuals who are able to choose the resources they need in an appropriate way and solve the problem with scientific methods play an active role in contemporary society. Raising individuals with these kind of qualities is made possible by the constant development of teaching methods. For this reason, the changes made in the educational systems show a progress from traditional teaching methods to contemporary approaches.

Learning is realized through active participation in the learning process, such as defending, hypothesizing, interrogating and sharing ideas. According to Crystal (1988), interaction requires collaboration and interaction with each other is very important (Perkins, 1999). Wilson (1997) indicated that strategies used in constructivist learning are the ones in which learners are active and learn by living such as; drama, projects, learning by designing, learning by teaching and learning by collaboration. An individual becomes more successful by being active in the learning process and by learning how to learn and how to solve the problems by the help of the previous knowledge (Steinert, 2004). In such a constructivist environment, students learn from each other, draw conclusions, make inferences and convey messages in a collaborative learning environment (Prawal, 1999) The studies carried out recently reveal that curriculum, which is based on the constructivist approach and cooperative learning model, is more effective in learning in all fields. In cooperative learning models, students work in small groups and help each other learn, which encourages students to get more motivated and improve their social skills as well. In other words, the work carried out with small groups increases academic achievement as well as social relations (Hancock, 2004).

Working in groups makes it easier to reach the goals and it has a greater power on the learners as well. The actions taken together reveals more

effective products than the ones performed by the individual himself. Thus, educational scientists have long been focused on the influence of collaboration in the educational process and have emphasized cooperation in group work in order to strengthen the individual's learning process and increase his /her success (Johnson & Johnson, 1999: 13).

Cooperative learning is a way of teaching in which small groups work to help each other so that they can gain academic knowledge (Slavin, 1995: 2). Johnson and Johnson (1995: 5) define cooperative learning as a teaching method in which students work collaboratively to maximize the learning of both their own and the other members of the group. According to Artzt and Newman (1990) cooperative learning is defined as an activity consisting of small learning groups that come together to solve the problem, to complete the task and to achieve a common goal. In such an activity, the teacher sets learning goals, gives directions about the work to be done and guides when necessary. The main goal of cooperative learning is to make the students active and encourage them to learn from each other. Since individuals can learn more easily while interacting with someone who knows the subject better than them (Hines, 2008).

In cooperative learning process, the members of the group organize their own learning processes by specifying their ideas, discussing about the problems and suggesting new solutions. They also develop social skills, such as taking responsibility, taking on different roles, accepting differences in heterogeneous groups, and sharing rewards throughout all the activities they perform in the group. Hence, not only their self-esteem develops but they learn to benefit from the differences of other individuals as well. In addition to enhancing the motivation of individuals to learn, the activities contribute to the development of a positive attitude towards the course and the school (Ekinçi, 2011).

Cooperative learning differs from traditional group work in that achievement of each member of the group determines the group achievement as a whole (Johnson & Johnson, 1999). In other words, each member acts as information source and support and help each other to reach the

common goal. This kind of cooperation provides positive interdependence and individual accountability for learners, since all individual members strive for the mutual goal and effort of the each member is crucial for the total achievement (Crandall, 1999). During the task, group assignments are divided into individual responsibilities and each member is assigned a different role, but to have more effective performance and for effective acquisition of knowledge, individuals should have face-to-face group interaction (Felder and Brent, 1994). To perform effectively in a group, each member should recognize, adapt and support each other. The communication between them must be clear and they must solve the problems in a constructive way. As stated by Slavin (1990), in order to reach the goal of the activities based on cooperative learning, students should be given small group skills and taught how interpersonal relations should be. By this way, individuals can learn to be a part of a group. Besides, studying in a group in a harmonious way can help individuals who are weak in terms of social skills work in a more productive and outgoing manner.

The success of a group is determined by how effectively the group works. In order to improve the functions of the members in group activities, learners need to evaluate their performance and experience, which behaviour is beneficial or not, whose contribution needs appraising, whether the communication level is adequate or not to reach the goal. This kind of group process contributes to the learning of social skills of students and assists the development of cooperative learning skills (Johnson and Johnson, 1999). As Kern et al. (2007) asserts group process also allows students to think on cognitive level as well as on metacognitive level.

#### COOPERATIVE LEARNING IN FOREIGN LANGUAGE ACQUISITION

Although there have been considerable changes in the field of language teaching all over the world during the past fifty years, traditional methods in which students just memorize the rules and internalize the morphology and syntax of the the target language are still being used in most parts

of the world (Zhang, 2010). Instead of using communicative ability in groups, discourse is generally realized between teacher and the student or rather than being an active participant, students are accepted as passive recipients drawing information just from the books or the teacher (Prawal, 1999).

Generally, students feel high level of anxiety during the foreign language acquisition which can debilitate both learning and achievement as well (Gardner, Smythe, & Lalonde, 1984, Young, 1991, Aida, 1994). As the students do not use their native language which is a tool to convey ideas, ask for help and express themselves better, they feel (precluded) handicapped in foreign learning process. So, anxiety has a crucial impact on inhibiting students' achievement. That is why cooperative learning can be applied as a means of changing the attitudes of the students during the activities. Since, the method helps the individuals alleviate the anxiety and learn from each other in a less threatening environment (Slavin, 1991). Learning in small and cooperative groups may enhance motivation to learn and change the beliefs and attitudes of the students about language acquisition if they feel secure to express themselves in their peer groups (Johnson, Johnson & Holubec, 1990).

In order to provide effective language learning, students should be given more opportunities to construct social interaction in the target language. In terms of its nature, cooperative learning has communicative function which provides authentic context where students listen to each other, ask and answer questions, comprehend language from various sources and get feedback from their peers (Ellis, 1999). Moreover, it helps the teacher to create student-centered atmosphere in which he/ she can observe the learners' weaknesses and strengths, their learning styles and the difficulties they have to overcome in the learning process (Sharan, 1994).

While dealing with the cooperative activities, each member of the group has the opportunity to interact in the target language. As Richards & Rodgers (2001, p. 193) states that "cooperative learning gives the learners opportunity of the naturalistic second language acquisition, internalizing the lexical items and daily speech

structures by means of interactive tasks and enhancing motivation by reducing stress in an positive learning environment.

#### ATTITUDE IN LANGUAGE ACQUISITION

Language acquisition is realized by the development of communicative competence, comprehending and conveying the messages and taking the rules of the grammar and the “cultural references” into account (Savignon, 1997). The willingness, interests, the level of anxiety of the individual in the interaction process determines how effectively the language is internalized. So, motivation, desire to learn, of an individual plays a crucial role in language acquisition. As Gardner and Lambert (1972) indicated that motivation to learn a second language creates positive attitude toward the target language and its culture and attitudes then become the milestone of motivation itself. Motivation can be affected by many factors. The task, the learning environment, group dynamics, as well as partner’s effort can determine and affect the learners’ motivation and attitude towards learning (Dörnyei, 2002). Thus, it is vital for the teachers to create a learning environment in which the students defend ideas, construct hypothesis, ask question, share ideas and encourage group cohesion as interaction between learners is quite essential in language learning (Kauchak & Eggen, 2003). When the interaction proceeds, rate of the language acquisition increases as well (Mackey, 1999).

As Kessler (1992) suggests, cooperative learning particularly in language learning context means that grouping the students of different levels of second language competence and encourage them to work together and benefit from each other by sharing their interactive experience. So, the method helps the good student tutor the weaker ones. Some students may feel isolated because of their low ability to learn the language while implementing individual tasks in the traditional instruction of the course. So, being in teams may stimulate them to speak out and feel more comfortable in small groups, which gives them the sense of self-confidence. On the other hand, while supporting the weaker students, the ones more competent can feel proud of themselves,

which leads them to develop positive attitude towards the course (Wichadee, 2005).

#### REFLECTIVE THINKING

Reflective thinking is the part of the critical thinking process of analyzing and evaluating decisions and it focuses on the judging process. Students know how to learn in the learning process, and they can combine reflection with thought. Students are aware of what they know and what they need to know. Reflective thinking, however, is crucial to encourage learning in solving the complex problems. This is because reflective thinking makes it possible for students to make a retrospective criticality, to involve in problem solving processes and to determine their attainment strategies (Koszalka, 1999).

Reflective thinking is defined in different ways. Boud, Keogh, and Walker (1985) describe reflective thinking as "reflection in the context of learning is a general term for intellectual and emotional activities that individuals engage in discovering new understanding and experience". Boud (1999) defines reflective thinking as an act of thinking about the learning process, rather than insisting on the necessity of learning of the students. Reflective learning is concerned with the students' understanding of their actions, their learning processes and experiences (Mann et al., 2009). Reflective thinking means that any belief or form of knowledge should be considered in an effective, persistent and careful manner and the teachers should organize the learning process on the basis of research and constructivism. In order to achieve this, the primary goal of the teachers should be to focus on teaching learning with the limited opportunities available within the classroom (Dervent, 2015).

Reflective thinking learning approach provides the learners with raising awareness about how to learn and how to improve their own abilities. Thus, the method creates an environment in which the students can take personal responsibilities of their own learning (Tilley et al., 2017). Reflective thinking is seen as an important component of education in practice, and many studies in literature have argued that reflective processes are necessary for the quality of learning (Barab and

Duffy, 1999, Lin, et al., 1999, Shon, 1987.) Since, in order to be able to perform a high-quality learning experience, the learners must be effectively aware of their own learning process. Reflective thinking is an ongoing critique systematic, and planned actions. In this context, by including self-evaluation and personal development items, it supports lifelong learning (Derwent, 2015).

The guiding role of teachers is very important in the application of reflective method in classroom environment. In this method, as the teachers use their own lives and experiences in their classes, they are accepted as the valuable sources of information. Likewise, it is very important for their students to reflect their knowledge, thoughts and experiences in the process of learning. Reflective thinking helps students become more aware of their own learning when they are faced with an astonishing problem. The steps to be followed include choosing the appropriate strategies to explore the question, identifying ways to create the information needed to solve the problem, and presenting an offer for the solution. Teachers should pay attention to the following steps in the lesson plan: asking the questions to the students clearly, contributing to ideas and activities to support the students' evaluations, asking sub questions to help the students think, encouraging the students to watch and re-evaluate the learning outcomes, preparing reflective worksheet encourage to the students to think over their progress (Koszalka, 1999).

In conclusion, it is necessary to expose the students to reflective learning experiences for the development of the reflective capacities of the students. Besides, the activities to be carried out should be organized in a way by means of which the students can make their own assessments of their learning and performances (Schon, 1987). Students are responsible for the completion of the activities carried out with both the individual and the group, when a cooperative learning model is applied. During this stage, the individual is responsible both for his or her own learning responsibilities, as well as for the success of the group.

Cooperative learning methods such as Jigsaw, Student Teams-Achievement Divisions Learning

Together, Cooperative Integrated Reading & Composition and Group Investigation can be applied in language classes to teach all skills (Shaaban & Ghaith, 2005). Studies conducted to determine the effect of cooperative learning on language learning shows that the method has positive effect on teaching language skills. Morley (2001) and Pinkeaw (1993) revealed that interaction facilitated both listening and speaking skills of the students. (Klinger & Vaughn, 2000; Readence, Moore & Rickelman, 2000; Hadyan, 2013; Khan and Ahmad, 2014) found that cooperative learning methods had positive effect on teaching reading skills. Murray (1992) suggested that the method supported the writing skills of the students. Meteetum (2001) investigated the effect of jigsaw technique on grammar competence and revealed that the technique developed the social skills and personal qualities of the students as well. In addition, during interaction, students' use of linguistic features and grammar competence enhanced. As is seen, cooperative learning method is an effective way of enhancing language skills as a whole but it helps the learners criticize his/ her learning process, change their attitudes towards language learning and enhance their motivation as well. Cooperative learning provide the learners with the chance of peer- tutoring and peer-monitoring, which allows them to evaluate their own learning and manage the learning process (Hertz-Lazarowitz, 1992).

Although there has been some research about students' towards cooperative learning on different subjects, there are limited studies on students' critical thinking skills and attitudes cooperative learning in a foreign language. That is why studying on the attitudes of students to cooperative learning and to what extent the method contributes to the students' critical skills can shed light on the effectiveness of the method in foreign language instruction. Although conducted on various subjects, cooperative learning in language teaching is an area of inquiry which should be developed. So, in order to realise the benefits and the drawbacks of the method, further studies should be exploited on foreign language teaching and learning in many aspects. Besides evaluating the effect of the cooperative learning on achievement, it is crucial to assess the

effect of cooperative learning on attitude and critical thinking skills of the students towards language learning. Since, achievement, anxiety, self-confidence, and motivation may be a directly related to attitudes.

## METHODS

### DESIGN

The study employed “non-equivalent control group pre-test and post-test design” which is one of the quasi-experimental designs to identify the effect of cooperative learning on the attitudes and reflective thinking skills of the students’ in English courses. In this model, two groups of the existing groups are matched according to pre-tests and randomly assigned (Büyüköztürk et.al., 2014). One group was designated as the experimental, and the other one was utilized as the control group. During the courses, while a cooperative learning is applied in the experimental group; a traditional method was performed in the control group. The scale of attitude towards English course and the scale of reflective thinking were applied as pre-test and post-test in both groups.

### PARTICIPANTS

This study was conducted on 66 students attending two different classes of the 10th grade of an Anatolian High School in the 2015-2016 spring term in Zonguldak Province. While the courses were instructed by using the traditional teaching method with the control group (N=33), “the Present Perfect Tense” grammar subject was taught to the experimental group (N=33) by means of Cooperative Learning-Learning Together technique. In order to determine whether both groups were equal or not, the scale of attitude towards English courses and the scale of reflective thinking were applied as pre-test. The scale of attitude towards English lessons pre-test indicated that there was no significant differences ( $t_{(52)}:1,591$ ;  $p>0,05$ ) between the experimental group students’ pre-test scores (M =3,98; SD=0,47) and the control group students’ pre-test scores (M =3,77; SD=0,49). According to the scale of reflective thinking pre-test results, there

was no significant differences ( $t_{(64)}:1,325$ ;  $p>0,05$ ) between the experimental group students’ pre-test scores (M =3,42; SD=0,54) and the control group students’ pre-test scores (M =3,25; SD=0,50) as well.

## INSTRUMENTS

### THE SCALE OF ATTITUDE TOWARDS ENGLISH LESSONS

The scale was developed by Anbarlı Kırkız (2010). It is composed of 20 items and 3 sub-dimensions. The first factor representing the beliefs about “general characteristics” consists of 11 items, the second factor “interest in the subject of the English course” contains 5 items and the third factor “the teaching style of the teacher” is composed of 4 items. The participants were asked to rate each statement on a 5-point scale from “Absolutely Disagree (1) to Absolutely Agree (5).” The scale consists of three factors explaining the total variance of 50,33%, and the factor load varied between 0,34 and 0,71. The first factor accounts for 25,70% of total variance, the second factor; 13,90% and the third factor; 10,73%. Cronbach’s alpha was found to be 0,93. In this study, internal consistency of the sub-dimensions of the scale were found as 0,89; 0,87; 0,78. The internal consistency coefficient for the whole scale was found to be 0,91.

### REFLECTIVE THINKING SCALE

The scale was used as an other instrument to evaluate the reflective thinking skills of the students towards English courses. The scale which was developed by Başol and Evin Gencil (2013) is a 5-point likert type consisting of (I strongly agree - I absolutely disagree) including 4 sub-dimensions (habit, comprehension, reflection and critical reflection) and 16 items. The internal consistency coefficient for the whole scale is 0,77. In this study, reliability values for (n= 66) of subdimensions of the scale were 0,65; 0,72; 0,54; 0,41 and the internal consistency coefficient for the scale was 0,78. Comprehension and habit sub-dimensions were not included in the assessment because of their low reliability.

## PROCESS

The aim of this study was to reveal the effect of cooperative learning on the attitudes and reflective thinking skills of the students' in English course. Learning together technique was applied in the experimental group while the control group was taught in the traditional method as suggested in the curriculum. The scale of attitude towards English lessons and the scale of reflective thinking were conducted as a pre-test on both groups.

Before the experiment, cooperative learning and learning together method were explained to the students in the experimental group. The students were divided into 6 groups. The groups were formed heterogeneously. In order to be able to create team spirit and provide positive interdependence, each group is required to identify a name, logo and a slogan that represents them.

At the end of each course, the groups completed the group assessment and individual assessment forms throughout the implementation process. At the same time, each student wrote their own diary and made assessments for both individual and group.

The diaries are written in such a way that the diaries are aimed at assessing the performances of the students in all the activities and the points in which they they need progress or doing well. For this reason, student diaries are an important resource for assessing students' own learning processes. At the end of the study, the same "The scale of attitude towards English lessons and the scale of reflective thinking" were conducted as a post test on both groups.

## ANALYSIS

Analyses were conducted with SPSS 20.0 software. In order to determine whether the data were normally distributed or not, Kolmogorov Smirnov test was applied.

A normal distribution of achievement scores was identified both for the experimental and the control group. Thus, the analyses were conducted via parametric t-test. Test and control group measurements were analyzed using a paired samples t- test and ANCOVA statistics. The statistics used to compare the means of the groups reveal whether there is a significant difference or not. Yet, they do not put forward the exact effect size. Moreover, test results do not provide information on how much of the total variance observed in the scores of the dependent variable results from the independent variable. For this, the size of the statistical significance must be known (Buyukozturk et.al., 2014). That is why in this study, as a measure of effect size eta square ( $\eta^2$ ) was utilized to be able to comment on how much of the variance in the test scores is dependent on the independent variable or group variable.

Considering the eta square ( $\eta^2$ ) indexes, 0,01 is considered to have a small, 0,06 a moderate and 0,14 a large effect (Green & Salkind, 2005; Buyukozturk et.al., 2014).

## FINDINGS

In order to calculate whether there is a significant difference or not of cooperative learning on the attitudes of the students' paired sample t-test for the pre-test and post-test scores of the students in the experimental and control groups was employed. Moreover, covariance analysis method was performed for comparison of experimental and control groups. In order to determine the effect size of difference the eta square ( $\eta^2$ ) was calculated.

Table 1. Paired Samples t test of Attitude

	Experimental						Control				
	Test	M	SD	t	p	$\eta^2$	M	SD	t	p	$\eta^2$
General characteristics	Pre-test	3,80	0,66	2,86*	0,00	0,23	3,53	0,68	0,00	1,00	-
	Post-test	4,24	0,28				3,53	0,76			
Interest in English course	Pre-test	3,51	0,29	6,17*	0,00	0,59	3,68	0,79	0,821	0,49	-
	Post-test	4,56	0,34				3,53	0,91			
Teaching style of the teacher	Pre-test	4,12	0,34	4,76*	0,00	0,47	4,10	0,48	0,564	0,57	-
	Post-test	3,70	0,31				4,02	0,67			
General	Pre-test	3,98	0,47	1,74	0,09	-	3,77	0,49	0,61	0,54	-
	Post-test	4,17	0,25				3,69	0,69			

\*p&lt;0,05

Table 2. ANCOVA Results of Attitude

	Source	Sum of Squares	df	Mean Square	F	p	Partial $\eta^2$
General Characteristics	Pre-test	2,064	1	2,064	6,81	0,12	0,11
	Group	5,188	1	17,137	6	0,000*	0,25
	Error	15,439	51	0,303			
	Total	24,381	53				
Interest in English course	Pre-test	1,585	1	1,585	3,61	0,06	0,06
	Group	15,178	1	15,178	34,65	0,000*	0,40
	Error	22,338	51	0,438			
	Total	38,235	53				
Teaching style of the teacher	Pre-test	0,985	1	0,985	0,05	0,06	-
	Group	1,471	1	1,471	0,02	0,09	-
	Error	13,311	51	0,261			
	Total	15,714	53				
General	Pre-test	1,277	1	1,277	4,98	0,03	0,08
	Group	2,147	1	1,247	8,37	0,00*	0,14
	Error	13,071	51	0,256			
	Total	17,410	53				

\*p&lt;0,05

#### GENERAL CHARACTERISTIC

The scale of attitude towards English lessons applied before the experiment was given to both groups of students after the experiment to see whether the intervention caused changes in using learning together technique. When “general characteristics” factor of the attitude test results were analyzed, it was found that there was a significant difference between pre-tests and post-tests in favor of post-test of experimental group ( $t_{(27)}=2,86$ ;  $p<0,05$ ;  $\eta^2=0,23$ ). On the contrary, there was not significant difference between pre-test and post-test means of control group ( $t_{(27)}=0,00$ ;  $p>0,05$ ). These values suggest that cooperative learning method had a large effect on

the attitudes of the high school students towards the general characteristics of the course. At the same time, the results indicated that cooperative learning increased the attitudes of the high school students towards the general characteristics of the course at the ratio of 22% while traditional instruction did not have a positive effect on the attitudes of the high school students towards the general characteristics of the course. ANCOVA analysis method was conducted for comparing post-tests of the two groups. When the attitude pre-test points related with the “general characteristics” were controlled, attitude post-test means of experimental group students was significantly higher than attitude post-test means of control group students ( $F_{(1,51)}=17,137$   $p<0,05$ ;  $\eta^2=0,25$ ). Eta square values indicate cooperative



learning has a large effect on increasing the attitudes of the students related with the the “general characteristics” of the course compared to traditional instruction. At the same time, this eta square value implies that cooperative learning predicts 25% of general characteristics means.

#### INTEREST IN ENGLISH COURSE

The attitudes of the students related with “Interest in English course” pre-test and post-test scores of experimental and control group students were compared with paired samples t test. Analysis showed that there was a significant difference between “Interest in English Course” pre-tests and post-tests in favor of post-test of experimental group ( $t_{(27)}=6,17$ ;  $p<0,05$ ;  $\eta^2=0,59$ ). On the contrary, there was not significant difference between pre-test and post test means of control group ( $t_{(27)}=0,821$ ;  $p>0,05$ ). These values suggest that cooperative learning method had a large effect on the attitudes of the high school students in terms of their interest in English Course.

Besides, it can be said that cooperative learning increased the attitudes of the high school students towards their interest in English Course at the ratio of 59% while traditional instruction did not have a positive effect on the interest of the high school students towards English Course. ANCOVA analysis method was conducted for comparing post-tests of the two groups. When the attitude pre-test points related with the “Interest in English Course” were controlled, attitude post-test means of experimental group students was significantly higher than attitude post-test means of control group students ( $F_{(1,51)}= 15,178$   $p<0,05$ ;  $\eta^2=0,40$ ). Eta square values indicate cooperative learning has a large effect on increasing the attitudes of the students related with the interest of the high school students towards English course compared to traditional instruction. At the same time, this eta square value implies that cooperative learning predicts 40% of interest in English Course means compared to traditional instruction

#### TEACHING STYLE OF THE TEACHER

The third sub-dimension of the attitude test was “Teaching Style of the Teacher” of which pre-test and post-test scores of experimental and control group students were compared with paired samples t test. According to the analysis results, there was a significant difference between pre-tests and post-tests in favor of pre-test of experimental group ( $t_{(27)}=4,76$ ;  $p<0,05$ ;  $\eta^2=0,47$ ). On the contrary, there was not significant difference between pre-test and post-test means of control group ( $t_{(27)}=5,61$ ;  $p>0,05$ ). These findings indicate that cooperative learning method had a large negative effect on the attitudes of the high school students towards the teaching style of the teacher. Eta square value of this sub-dimension was found as ( $\eta^2=0,47$ ) which means cooperative learning has 47% negative effect on the attitudes of the students about teaching style of the teacher when pre-test score results of the experimental group controlled. ANCOVA analysis method was conducted for comparing post-tests of the two groups. When the “Teaching Style of the Teacher” pre-test points were controlled, the results indicate that there is no significant difference between the post-test means of both groups ( $F_{(1,51)}= 0,02$ ;  $p>0,05$ ). Thus, it indicates that cooperative learning does not have a positive effect on the attitudes of the course of the students related with the teaching style compared to traditional education.

#### GENERAL

When total points of the attitude scale are taken into account, the results indicate that there is a significant difference in favor of the experimental group between the post-test means of both groups when the pre-test means were controlled ( $F_{(1,51)}= 8,3$   $p<0,05$ ). Eta square value ( $\eta^2=0,14$ ) shows that cooperative learning increased the attitudes of the students at the ratio of 14% when compared with the control group which means the technique had a large effect on attitudes of the students towards English Course.

In this study, the effect of cooperative learning on the reflective skills of the students was examined as well. The findings were presented on the table 3 and 4.

Table 3. Paired Samples t-test for Reflective Thinking Skills

	Experimental						Control				
	Test	M	SD	t	p	$\eta^2$	M	SD	t	p	$\eta^2$
Reflection	Pre-test	3,77	0,70	1,03	0,30	-	3,62	0,64	1,22	0,22	-
	Post-test	3,94	0,48				3,43	0,81			
Critical Reflection	Pre-test	3,07	0,64	3,66	0,00*	0,30	2,88	0,63	1,31	0,19	-
	Post-test	3,65	0,61				2,65	0,87			
General	Pre-test	3,42	0,54	2,64	0,01*	0,18	3,25	0,50	1,49	1,44	-
	Post-test	3,79	0,45				3,04	0,79			

\*p&lt;0,05

Table 4. ANCOVA Results for Reflective Thinking Skills

	Source	Sum of Squares	df	Mean Square	F	P	Partial $\eta^2$
Reflection	Pre-test	0,071	1	0,71	0,156	0,69	0,00
	Group	4,198	1	4,198	9,22	0,00*	0,12
	Error	28,683	63	0,455			
	Total	33,133	65				
Critical Reflection	Pre-test	0,101	1	0,101	0,174	0,67	0,00
	Group	15,758	1	15,758	27,19	0,00*	0,30
	Error	36,509	63	0,580			
	Total	53,11	65				
General of Reflection Skills Scale	Pre-test	0,050	1	0,050	0,117	0,218	0,02
	Group	8,998	1	8,998	21,240	0,00*	0,25
	Error	26,688	63	0,424			
	Total	36,207	65				

\*p&lt;0,05

The scale of reflective thinking skills towards English lessons applied before the experiment was given to both groups of students after the experiment to see whether the intervention caused changes in using learning together technique.

#### REFLECTION

The “reflection” pre-test and post-test scores of experimental and control group students were compared with paired samples t test. The results in the table 4 showed that there was not a significant difference between pre-tests and post-tests of experimental group ( $t_{(32)}=1,03$ ;  $p>0,05$ ) and of control group ( $t_{(32)}=1,22$ ;  $p>0,05$ ) in terms of “reflection” sub-dimension. These findings indicate that cooperative learning method does not have a positive effect on the reflection skills of the students. However, according to ANCOVA analysis results, when the reflection pre-test points of both groups were controlled, “reflection” post-test means of experimental group students was significantly higher than reflection post-test means of control group students ( $F_{(1,63)}= 9,22$ ;  $p<0,05$ ;  $\eta^2=0,12$ ). Eta

square values indicate cooperative learning has large effect on the reflection skills of the students compared to traditional instruction. In addition, this eta square value implies that cooperative learning has contributed to the reflection skills of the students at ratio of 12% more than that of the traditional instruction.

#### CRITICAL REFLECTION

“Critical reflection”, the second sub-dimension of the “Reflective Thinking Scale” indicate that there existed significant difference between pre-tests and post-tests in favor of post-test of experimental group ( $t_{(32)}=3,66$ ;  $p<0,05$ ;  $\eta^2=0,30$ ) On the contrary, there was not significant difference between pre-test and post-test means of control group ( $t_{(32)}=1,31$ ;  $p>0,05$ ). These values suggest that cooperative learning method had a large effect on the reflection skills of the high school students. ANCOVA analysis method was conducted to compare post-tests of two groups. When the “critical reflection” pre-test points were controlled, the results indicate that there is a significant difference between the post-test means

of both groups in favor of the post-test means of the experimental group ( $F_{(1,63)}=27,19$   $p<0,05$ ;  $\eta^2=0,30$ ). This eta square value implies that cooperative learning has contributed to critical reflection skills of the students at a ratio of 30% more than that of the traditional instruction.

#### GENERAL

When total points of the “Reflective Thinking Scale”, the results indicate that there is a significant difference in favor of the experimental group between the post-test means of both groups when the pre-test means were controlled ( $F_{(1,63)}=21,24$   $p<0,05$ ). Eta square value ( $\eta^2=0,25$ ) shows that cooperative learning increased the reflective thinking skills of the students at the ratio of 25% when compared with the control group which means the technique had a large effect on the reflective skills of the students towards English Course.

#### CONCLUSION AND DISCUSSION

Considering the progressive language teaching methods, cooperative learning possesses noteworthy advantages in terms of attitudes and reflective thinking skills of the students towards language learning. The aim of this study was to investigate the effects of cooperative learning activities on the attitudes and reflective thinking skills of the students’ in English course.

It was concluded that cooperative learning has a large effect on the attitudes towards English course in terms of “general characteristics and interest” sub-dimension when compared with traditional instruction. An effective language acquisition is realized through cooperatively organized interactive activities. By this way, it is possible to break down the stereotype instruction techniques and let the students act in a democratic and independent way (Richards & Rodgers, 2001). Hence, it is crucial that cooperative learning should be integrated in language classrooms as it provides students various authentic language learning environment and encourage students to use target language more often than the traditional activities. Hossain and Tarmizi (2013) found that cooperative learning

had significant effects on attitudes towards mathematics. Bilgin (2009) aimed to investigate the effects of guided inquiry instruction incorporating with cooperative learning environment on University students’ achievement of acid and bases concepts and attitude toward guided inquiry instruction. He revealed that both the achievement and attitude levels of the students were promoted through the cooperative tasks which shows that positive attitude can also decrease anxiety and enhance achievement.

Similarly, in his study Wichadee (2005) found that cooperative learning had a significant impact on the students’ attitudes towards English. Sittilert (1994) investigated the effects of Cooperative Integrated Reading and Composition (CIRC) on English reading comprehension and the opinions towards classroom atmosphere. According to the results, the method helped the low achievement students enhance their ability and they developed positive attitude towards classroom atmosphere. Meteetum (2001) who conducted a case study research on cooperative learning by using the jigsaw technique with nine second-year English major students at Naresuan University aimed to study on the use of linguistic features in interaction and the attitudes of the students. The results showed that in addition to the improvement in achievement of the students, they demonstrated positive attitude towards cooperative learning. The same kind of results towards cooperative learning in language acquisition were obtained by those of (Somapee, 2002; Seetape, 2003; Farzaneh & Nejadansari, 2014) as the positive perception of the learning environment affects the learners’ attitude. Otherwise; Nam (2008) investigated the effectiveness of positive interdependence and group processing on student achievement, interaction, and attitude in online cooperative learning. The results of this study suggested that neither of the techniques did not have influence on students’ attitude in online cooperative learning environments.

The second finding of the study indicated that reflective thinking based on cooperative learning had a medium effect on reflection skills and large effect on critical reflection skills when compared

with traditional teaching. In order to help students gain reflective thinking skills strategies, a curriculum designed to promote students' ability to reflect, teachers having reflective thinking skills, course contents supporting students and a democratic and collaborative classroom environment encouraging scientific thinking of the students are vitally required (Sünbül, 2010). New instructional methods focus on the cooperative learning and development of critical thinking of the students. So, many studies have been conducted to investigate the reflective thinking skills of the students, pre-service teachers and teachers (Şanal, 2006; Kozan, 2007; Ersözülü, 2008; Meral, 2009; Şahin, 2009; Demiralp, 2010; Karadağ, 2010; Durdukoca & Demir, 2012). However, there has been lack of research to determine influence of reflective thinking skills incorporated with cooperative learning especially in language acquisition.

Baloche (1998) revealed that utilizing cooperative learning activities enhanced the management skills of the students. Since, they arranged their tasks regarding the planned schedule and time and they dealt with the problems they faced in a respective manner. Baş and Beyhan (2012) investigated the effect of reflective thinking skills of the students in English course and they revealed that reflective thinking skills promoted the achievement of the students. Evan's (2009) research demonstrates a parallel result that reflective thinking enhances achievement and retention. McCrindle and Christensen (1995) studied the effect of learning diaries on cognition, meta-cognition and learning performance. They found that the students keeping diaries showed greater performance as writing diaries help students to think over their performances and learning strategies. In this study, the students kept reflective diaries and they demonstrated the researchers that these learning diaries give the students the chance of self- evaluation, analyze and synthesize the performance of their own and the group.

As this study suggests, cooperative learning can be an effective way to promote positive attitude towards second language acquisition and it can support the reflective skills of the students as well.

Further studies can be conducted to evaluate the attitudes of the teachers' towards cooperative learning. If the study is applied by using qualitative techniques, it can be possible to get more information about how to arrange effective cooperative environment and how to tackle with the problems during the implementation process according to which teachers can offer more student-centered atmosphere. Besides, evaluating attitude and reflective thinking skills requires longer implementation and observation period. This study was conducted for 5 weeks. So, in order to assess the retention of the knowledge, the experiment should extend over a longer period of time.

On the whole, the findings of this study have shown a large effect on the attitudes and the reflective thinking skills of the students towards English. Therefore, cooperative learning can be successfully used to improve the students' attitudes towards English Course in a positive way and help them raise their awareness about how to learn and how to improve their own abilities in different disciplines. That is why, future studies should focus on the longitudinal study of cooperative learning on motivation, attitude and reflective thinking skills in English courses.

#### REFERENCES

- Aida, Yukie. "Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of student's of Japanese". *The Modern Language Journal*, 78 (1994): 155-168.
- Baloche, Lynda. *The cooperative classroom: Empowering learning*. Saddle River, NJ: Prentice-Hall 1998.
- Baş, Gökhan and Ömer, Beyhan. "İngilizce dersinde yansıtıcı düşünme etkinliklerinin öğrencilerin akademik başarılarına ve derse yönelik tutumlarına etkisi". *Amasya Üniversitesi Eğitim Fakültesi Dergisi*, 1(2) (2012): 128-142.
- Buyukozturk, Sener, Omay Cokluk and Nilgün Koklu. *Sosyal bilimler için istatistik [Statistics for social sciences]* (14th. Edition). Ankara: Pegem Akademi 2014.
- Crandall, Joann Jodi. (1999). Cooperative learning and affective factors. In J. Arnold (Ed.), *Affect in language learning* (pp. 226-245). Cambridge: Cambridge University Press.

- Demiralp, Demet. “İlköğretim birinci kademe programlarının öğrencilerin yansıtıcı düşüncelerini geliştirmeye etkisine yönelik öğretmen görüşleri (Elazığ ili örneği)”. Yayınlanmamış yüksek lisans tezi, Fırat Üniversitesi Sosyal Bilimler Enstitüsü, Elazığ 2010.
- Dörnyei, Zoltán. The motivational basis of language learning tasks. In P. Robinson (Ed.), *Individual differences and instructed language learning 2* (137-158). Amsterdam: John Benjamins 2002.
- Durdukoca, Fırat Şule and Mehmet Demir. “İlköğretim öğretmenlerin bazı değişkenlere göre yansıtıcı düşünme düzeyleri ve düşüncelerindeki öğretmen niteliklerinin yansıtıcı öğretmen niteliklerine uygunluğu”. *Mustafa Kemal University Journal of Social Sciences Institute*, 9 (20) (2012): 357-374.
- Ellis, Rod. *Learning a second language through interaction*. Philadelphia: John Benjamins 1999.
- Ersözlü, Nur Zehra. *Yansıtıcı düşünmeyi geliştirici etkinliklerin ilköğretim 5. Sınıf öğrencilerinin sosyal bilgiler dersindeki akademik başarılarına ve tutumlarına etkisi*. Yayınlanmamış doktora tezi, Fırat Üniversitesi Sosyal Bilimler Enstitüsü, Elazığ 2008.
- Evans, Laurynn. *Reflective assessment and student achievement in high school English*. A Dissertation Thesis, Seattle Pacific University the Graduate School of Education, Seattle 2009.
- Farzaneh, Nima and Dariush Nejadansari. “Students’ attitude towards using cooperative learning for teaching reading comprehension”. *Theory and Practice in Language Studies*, 4 (2) (2014): 287-292.
- Felder, Richard M and Rebecca Brent. Cooperative learning in technical courses: Procedures, pitfalls, and payoffs. Work Supported by National Science Foundation Division of Undergraduate Education Grant, ERIC Document Reproduction Service Report ED 377038 1994. Available at <http://www.ncsu.edu/felderpublic/Papers/Coopreport.html>.
- Gardner, Robert C., et. al. “Second Language attrition: The role of motivation and use”. *Journal of Language and Social Psychology*, 6 (1987): 29-47.
- Gardner, Robert C. and Wallace E Lambert. *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House 1972.
- Green, Samuel and Neil Salkind. *Using SPSS for windows and macintosh: analyzing and understanding data (3rd edition)*. Upper Saddle River, NJ: Pearson Education 2003.
- Hadyan, Rifki. “Implementation of the cooperative learning method in teaching reading comprehension”. *Journal of English and Education*, 1 (2) (2013): 57-64.
- Hancock, Dawson. “Cooperative learning and pe orientation effects on motivation and achievement”. *Journal of Educational Research*, 97 (3) (2004): 159-166.
- Hertz-Lazarowitz, Rachel. Understanding interactive behaviors: Looking at six mirrors of the classroom. In R. Hertz-Lazarowitz & N. Miller (Eds). *Interaction in cooperative groups* (pp. 71-101). Cambridge: Cambridge University Press 1992.
- Hossain, Anowar and Ahmad Rohani Tarmizi. “Effects of cooperative learning on students’ achievement and attitudes in secondary mathematics”. *Procedia – Social and Behavioral Sciences* 93 (2013): 473 – 477.
- Johnson, David W, Roger T Johnson and Edythe Houbec Johnson. *Circles of learning: Cooperation in the classroom*. Edina, MN: Interaction Book 1990.
- Johnson, D. W. and Roger T Johnson. *Learning together and alone cooperative, competitive and individualistic learning*, (5. ed.). Boston: Allyn and Bacon 1999.
- Karadağ, Mümtaz. *Sosyal bilgiler öğretmenlerinin yansıtıcı düşünme düzeylerinin incelenmesi (Şanlıurfa ili örneği)*. Yayınlanmamış yüksek lisans tezi, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü, Adana 2010.
- Kauchak, Donal P. and Paul D Eggen. *Learning and teaching research based methods*. Boston: Allyn & Bacon 2003.
- Kern, Anne L., Tamara J. Moore and Caglin F. Akillioglu. Cooperative Learning: Developing an Observation, Instrument for Student Interactions, October 10 – 13, Paper presented at the 37th ASEE/IEEE frontiers in education conference, WI Milwaukee 2007. Available at <http://fieconference.org/fie2007/papers/1107.pdf>.
- Kessler, Carolyn. *Cooperative language learning*. Englewood Cliffs, New Jersey: PrenticeHall 1992.
- Khan, Shafqat Ali and Rana Navid Khan Ahmad. Evaluation of the effectiveness of cooperative learning method versus traditional learning method on the reading comprehension of the students. *Journal of Research and Reflections in Education*, 8 (1) (2014): 55-64.
- Kozan, Saliha. *Yansıtıcı düşünme becerisinin kaynak tarama ve rapor yazma dersindeki etkisi*. Yayınlanmamış yüksek lisans tezi, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya 2007.
- Klinger, Janette K. and Sharon Vaughn. “The helping behaviors of fifth graders while using collaborative strategic reading during ESL content classes”. *TESOL Quarterly*, 34 (2000), 69-98.
- Mackey, Alison. “Input, interaction, and second language development: An empirical study of question formation in ESL”. *Studies in Second Language Acquisition*, 21 (1999): 557-587.
- McCordle, Andrea R and Carol A Christensen. “The impact of learning journals on metacognitive and cognitive processes and learning performance”. *Learning And Instruction*, 5 (1995): 167-185.
- Meral, Ece. *Yeni (2006) ilköğretim İngilizce programını uygulayan öğretmenlerin eleştirel ve yansıtıcı düşünceleri*. Yayınlanmamış yüksek lisans tezi, Fırat Üniversitesi Sosyal Bilimler Enstitüsü, Elazığ 2009.
- Meteetham, Pongsakorn. *Case study of cooperative learning by using jigsaw technique with second year English major students at Naresuan University*. M.A. Dissertation, Mahidol University 2001.

- Murray, Denise E. Collaborative writing as a literacy event: Implications for ESL instruction. In D. Nunan (Ed.), *Collaborative language learning and teaching* (pp. 100-117). Cambridge: Cambridge University Press 1992.
- Nam, Chang Woo. The relative effectiveness of positive interdependence and group processing on student achievement, interaction, and attitude in online cooperative learning. A Dissertation Thesis, Texas A&M University 2008.
- Perkins, David. "The many faces of constructivism". *Educational Leadership*, 57 (1999): 6-11.
- Pinkeaw, P. *Students' views on interaction and learning achievement through cooperative learning method in upper-secondary English classes*. M.A. Dissertation, Chiangmai University 1993.
- Prawal, S. Richard. "Social Constructivism and the Process Content Distinction as Viewed by Vygotsky". *The Pragmatists Culture & Activity*, 16 (4) (1999): 255-276.
- Readence, John E., David W Moore and Robert J. Rickelman. *Pre-reading activities for content area reading and learning*. (3rd ed.) Dover, DE: International Reading Association 2000.
- Savignon, Sandra. *Communicative competence: Theory and classroom practice*. New York: McGraw-Hill 1997.
- Seetape, Nilubol. *Effects of cooperative learning on English reading achievement and learning behaviours of mathayomsuksa three students in Kanchanaphisekwittayalai Uthaithani School*. M.A. Dissertation, Kasetsart University 2003.
- Sharan, Shlomo Ed. Cooperative learning and the teacher. In S. Sharan (Ed.), *The handbook of cooperative learning methods*, (pp. 336-348). Westport, CT: Praeger Publishers 1994.
- Schon, Donald A. *Educating the reflective practitioner*. San Francisco: Jossey-Bass 1987.
- Sittilert, Worapan. *Effects of cooperative integrated reading and composition (CIRC) on English reading comprehension and opinions about classroom atmosphere of mathayomsuksa five students*. M.A. Dissertation, Chiangmai University 1994.
- Slavin, Robert E. (1990). *Cooperative learning: Theory, research and practice*. New Jersey: Prentice Hall.
- Slavin, Robert E. "Synthesis of research on cooperative learning". *Educational Leadership*, 48 (1991): 71-82.
- Slavin, Robert E. *Cooperative learning: Theory, research and practice*, (2nd Ed.). Boston: Allyn & Bacon 1995.
- Somapee, Supaporn. *The effectiveness of using cooperative learning to enhance students' critical thinking skills in business English I at Chiangrai commercial school in Chiangrai*. M.A. Dissertation, Payap University 2002.
- Steinert, Yvonne. "Student Perceptions of Effective Small Group Teaching". *Medical Education* 38 (2004): 286.
- Sünbül, Ali Murat. *Öğretim ilke ve yöntemleri*. (4. baskı). Konya: Eğitim Akademi Yayınları 2010.
- Şahin, Çiğdem. "Fen bilgisi öğretmen adaylarının yansıtıcı düşünme yeteneklerine göre günlüklerinin incelenmesi". *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 36 (2009): 225-236.
- Şanal, Senem Erginel. *Developing reflective teachers: A study on perception and improvement of reflection in pre-service teacher education*. Yayımlanmamış yüksek lisans tezi, Orta Doğu Teknik Üniversitesi Sosyal Bilimler Enstitüsü, Ankara 2006.
- Turnbull, Miles. "Cooperative learning in second language classes: Two techniques to consider". *Canadian Modern Language Review*, 52 (1996): 150-157.
- Wichadee, Saovapa. "The effects of cooperative learning on English reading skills and attitudes of the first-year students at Bangkok University". *BU Academic Review*, 4(2) (2005): 22-31.
- Young, Dolly Jesusita. "Creating a low-anxiety classroom environment: What does the anxiety research suggest?". *Modern Language Journal*, 75 (1991): 426-439.
- Zhang, Yan. "Cooperative language learning and foreign language learning and teaching". *Journal of Language Teaching and Research*, 1 (1) (2010): 81-83.