# The Opinions and Self-Assesments of the 7<sup>th</sup> Grade Students Regarding the Jigsaw I Technique among the Cooperative Learning Practices in the Social Studies Course

Osman Çepni<sup>1,\*</sup> & Sibel Temizbaş Öner<sup>2</sup>

<sup>1</sup>Department of Geography, Faculty of Letters, Karabuk University, Karabuk, Turkey

<sup>2</sup>Ministry of National Education, Şehit Cihan Yıldız Secondary School, Mamak, Ankara, Turkey

\*Correspondence: Karabuk University Iron and Steel Campus, 78050, Karabuk, Turkey. Tel: 90-370-433-8294 E-mail: ocepni@karabuk.edu.tr

Received: June 18, 2015Accepted: July 12, 2015Online Published: August 6, 2015doi:10.5430/jct.v4n2p22URL: http://dx.doi.org/10.5430/jct.v4n2p22

## Abstract

The purpose of the present study was to find out the opinions of the 7<sup>th</sup> grade students about the cooperative learning practices applied in the social studies course. The study was carried out for 3 weeks on the 7<sup>th</sup> grade students studying at Şehit Cihan Yıldız Secondary School in Mamak District of Ankara. In this study where the survey model and the content analysis were used together, an open-ended semi-structured question form about the cooperative learning practices and a self-assessment scale were used for data collection. Means, standard deviations, and t-tests were used in the analysis of the quantitative data while content analysis was used in the analysis of the qualitative data. The participants indicated that thanks to the cooperative learning practices, their interest towards and participation in the lessons increased; the lessons became more enjoyable; their bonds of friendship were tightened; and they helped each other so that they could be successful as a group.

**Keywords:** *social studies; cooperative learning; students' opinion; self-assessment* 

## 1. Introduction

Being one of the cornerstones of education, the learning practices implemented in primary and middle schools are truly essential. Due to the presence of some abstract concepts that are difficult to learn in social studies lessons and the fact that students have not entered the formal operational stage yet, the methods that integrate students actively into the learning process play a very significant role (Nilsson and Driel 2010; Thurston et al. 2010). Ensuring that social studies courses help students gain the desired qualifications is only possible through a proper planning of learning environments and strategies and the adjustment of the learning process just like such factors as the method or approach the teacher uses, teaching materials, teaching service, teaching program, and curriculum (Aydın, 2013).

The above-mentioned factors should be taken into consideration by teachers carefully so that students turn the gains into behavior. The teaching techniques applied in social studies lessons are generally not sufficient for students' learning and using what they learn. This is mainly because teacher-centered methods are applied besides those in which some or all students are inactive. Instead of these, the teaching methods which take the student to the center, are based on learning by doing and experiencing, aim at permanent learning, and allow the teacher to guide students should be preferred.

The new (2005 curriculum) social studies curriculum aims to ensure that the student constructs the knowledge himself/herself based on his/her own life (Safran, 2004). One of the teaching methods introduced within the scope of this aim is the cooperative learning method. The environment best suited for the constructivist approach is the one giving all students the opportunity to learn instead of one where students are left alone in the learning environment or are constantly compared with one another. Such a learning environment can be created best with the cooperative learning method (Atasoy, Genç, Kadayıfçı, and Akkuş, 2007). Cooperative learning can be described as the learning

method ensuring that students create small mixed groups both in and out of the classroom and help one another to learn about an academic subject in line with a common purpose, thereby increasing their self-confidence, developing their problem-solving and critical thinking skills, and actively participating in the learning process (Buzludağ, 2010; Ballantine and Larres, 2007; Ding, 2007; Karakoyun, 2010; Lin, 2006; Maden, 2011).

In cooperative learning, students work in small groups in order to accomplish a common goal and are responsible for their own and each other's learning (Johnson and Johnson, 1999, p.23). Asking students to work in small groups is a very common method, but when students are placed into groups, it is not known for sure whether or not they learn what is intended to be learnt (Snow, 2005, p. 35). For this reason, any group work should not be considered a cooperative learning. To call a group work cooperative learning, it is necessary to fulfill the conditions of positive interdependence, face-to-face interaction, individual assessment, social skills, and the evaluation of the group study (Johnson and Johnson, 1994, p. 22).

As understood from the descriptions above, cooperative learning means working together in order to achieve a common goal. In cooperative learning, heterogeneous groups are formed based on different characteristics, skills, and ways of learning of students. Students work together to learn and are responsible for their teammates' learning as well as their own learning. Success is a group achievement obtained with the contribution of each member. The contributions of group members are measured in an evaluation, and the group's success is awarded (Aydın, 2011).

Cooperative learning increases the motivation of students and ensures that they develop positive feelings towards one another (Saban, 2004), helps them to respect others' opinions and to be tolerant while making a discussion (Senemoğlu, 2001), and reveals the different points of view they have (Davidson and O'Leary, 1990). Stamovlasis et al. (2006) point to the rising popularity that cooperative learning has gained over the last years among the other learning methods. To Johnson and Johnson (1992), one of the reasons for this popularity is that cooperative learning can be applied successfully in any age group, any grade, and in the teaching of any lesson or unit.

Cooperative learning is considered a tool to encourage students to achieve a common goal in work environments and at home and to work as a team when needed (Eilks, 2005; Gillies, 2006; Lin, 2006). Cooperative learning is a term involving various education approaches that require the participation of students or both teachers and students in an activity and their joint effort (Delucchi, 2006).

Johnson, Johnson, and Stanne (2000) demonstrate that cooperative learning is necessary for cognitive, social, and psychomotor development besides the main targets of education. Many similar studies indicate that cooperative learning activities result in high individual success rather than competitive or individual learning. Cooperative learning approach is implemented by educators across the world. It is based on a strong combination of theory, research, and practice.

It is possible to argue that the classroom sizes of many schools in Turkey are far above the standards at the present time. Another reason for the popularity of the cooperative learning method is that it can be applied successfully in such crowded classrooms. Some advantages provided by this method are that it ensures active participation of all students in lessons given in crowded classrooms and that it allows all students to ask questions, answer questions, and express their opinions (Johnson, Johnson and Smith, 1991).

The suitability of cooperative learning for social studies lessons is stressed in a line of studies (Baltaoğlu and Açıkgöz, 2012; Gökdağ, 2004; Kuş and Karatekin, 2012). It is especially asserted that the content of this course requires students to think, discuss, comment on the causes and effects, find examples, process the knowledge they acquire, and describe such knowledge with their own sentences. Skell (1991) found some links between cooperative learning and the aims of the social studies course indicated by the National Council for the Social Studies (NCSS). It can be stated that the problems encountered in the realization of the aims of the social studies course can be eliminated through an effective learning process. Based on this idea, the present study aims to investigate students' opinions about the implementation of cooperative learning method in social studies lessons.

# 2. Method

# 2.1 Research Design

In the present study, the survey model was used for examining secondary school students' opinions about cooperative learning practices. The survey model is a research approach describing the interactions between situations by taking into account the relationship between the current situations and the previous situations and conditions (Kaptan, 1998). This is a descriptive (qualitative) research in which the content analysis was carried out after taking students' opinions about cooperative practices through open-ended questions. Content analysis is carried out systematically,

objectively, and numerically in order to measure the variables in a text (Wimmer and Dominick, 2000). To Yıldırım and Şimşek (2008), descriptive model establishes the link between variables without any change after researching the current situation of the subject. Descriptive studies are often carried to explain a situation, to make evaluations in line with some standards, and to find out the potential relationships between different situations. The main purpose in such studies is to describe and explain the investigated situation in detail. In the present study, it was aimed to investigate students' opinions regarding the application of the cooperative learning method in the social studies course through semi-structured interviews them.

## 2.2 Study Group

The study group of the present study was composed of 23 7th grade students studying at Şehit Cihan Secondary School in Mamak District of Ankara. Eleven of these 23 students were female, and twelve were male.

#### 2.3 Measures

In order to find out the middle school students' opinions about the cooperative learning practices applied for 3 weeks in the social studies course, semi-structured interview forms and self-assessment forms were used for data collection.

#### 2.3.1 Semi-Structured Interview Form

The semi-structured question form that was also used by Tonbul (2001) and Aydın (2009; 2013) in their studies in order to take students' opinions about cooperative learning was reviewed by 2 academicians specialized in social studies teaching, and in line with the recommendations of these experts, the form was considered appropriate in its final version arranged by Aydın (2013). In the semi-structured question form, there are 9 open-ended questions about the cooperative learning practices. The qualitative data obtained through the interviews were subjected to descriptive analysis (Yıldırım and Şimşek, 2008).

#### 2.3.2 Self-Assessment Form

At the end of the implementation of cooperative learning practices for 3 weeks in the social studies course, 7 scaled self-assessment scales were administered to the students. The self-assessment scale has been prepared by the Republic of Turkey Ministry of National Education and used by some researchers in their studies as a data collection tool (Aydın, 2013; Turaçoğlu, 2011). Both the values obtained from the administration of the scale as a pilot study (Cronbach's alpha reliability coefficient:  $\alpha = .70$ ; KMO Value: .79; Bartlett's test values:  $\chi 2 = 98.139$ ; p < .00) and the recommendations by experts demonstrate that the implemented survey has a high level reliability.

## 2.4 Implementation

The study was carried out in the spring semester of the 2013-2014 academic year at Şehit Cihan Yıldız Secondary School in Mamak District of Ankara for 3 weeks (3 hours a week). During this time, Cooperative Learning Method (Jigsaw I) was applied to the students. The subjects given during the experiment, their distribution by course duration, and the techniques applied are presented in Table 1.

| Duration                    | Subject   | Method<br>Applied | The Educational Operarions<br>Conducted |
|-----------------------------|---|-------------------|---|
| The 1 <sup>st</sup><br>Week | <ul> <li>Preparation for cooperative learning practices;</li> <li>Introduction to the 'Global Solutions to Global</li> <li>Problems' subject, its aim, and historical</li> <li>development</li> </ul> | Brain Storming    | Information Meeting                     |
| The 2 <sup>nd</sup>         | The establishment purposes of international organizations concerned with global problems  | Jigsaw I          | Worksheet, Problem-Solving,             |
| Week                        |   | Technique         | Group Exam                              |
| The 3 <sup>rd</sup>         | Individual responsibilities for putting the solutions to global problems into practice  | Group             | Group Presentations,                    |
| Week                        |   | Research          | Self-Assessment                         |

**Table 1.** The Subjects Given, Their Distribution by Course Duration, the Techniques Applied, and the Educational

 Operations Conducted

#### *The operations carried out during the implementation are as follows:*

Before the implementation, an information meeting was held with the students regarding the conceptual framework of the cooperative learning method and how to apply it (05.03.2013).

In the second and the third week, Jigsaw I, which is one of the techniques of the cooperative learning method, was

applied. In the first week, the students were divided into heterogeneous groups (of 2 to 6 students). These groups were formed based on the students' fall semester grade-point averages (academic success) and gender.

The desks in the classroom were arranged so as to facilitate face-to-face interaction (*photo 1*), and an activity was conducted so that the group members would get to know each other better (*photo 2*). The groups were defined precisely by choosing a head of group and a group name.



Photo 1. Pictures from Small Groups

Later, it was explained to students how they would learn in that process and how their progress would be evaluated. The first stage practices of the Jigsaw *I* technique were completed after the distribution of necessary materials to each student in the main groups.

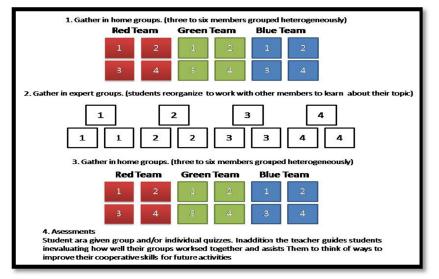


Fig 1. Jigsaw Teams

During the expert research (i.e. the second stage), the students who handled the same part of the related subject came together in the same group, and thus expert groups were formed. The students in these expert groups researched and prepared the subject titles which they would teach to their teammates when they returned to their initial groups. At this stage, the students were guided and encouraged to share their opinions and cooperate with their friends while explaining their ideas. At the end of this stage, the students in the expert groups completed the steps about learning their own subject titles.

At the report preparation and reformatting stage, the students in the expert group returned to their initial groups and tried to teach their teammates the subject titles that they researched in the expert groups. During this stage, they discussed the subjects in detail with their friends in their initial groups and learnt and taught the subject titles well. All of the group members in the initial groups completed their works with a report after they taught the subject titles to one another.

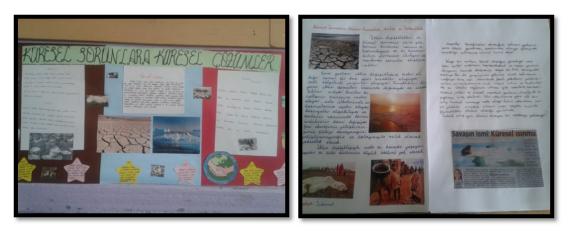


Photo 2. Examples from the Works Prepared by the Students during the Cooperative Learning Practices

Preparing the report through reaching a conclusion about the knowledge they obtained during the research by making a synthesis of such knowledge at the final report preparation stage, the groups discussed and decided how they would make their presentation to the class. Within the scope of the presentations, one student explained the stages of preparing the report; one student dealt with the works about the computer; two students made the presentation; and one student was responsible for answering the questions to be asked by the other groups at the end of the presentation. Having presented the results of the research within the time spared for them (15 minutes), the group members asked the opinions of the other students in the classroom.

## 2.5 Data Analysis

Two data collection tools were used to get the opinions and self-assessments of secondary school students at the end of the cooperative learning practices. Within the scope of the first data collection tool, 8 open-ended question forms about the cooperative practices were distributed. For the analysis of the students' opinions, the content analysis method, which is a descriptive analysis technique, was used. For this purpose, codes were created about the students' opinions and examples to the students' statements were included in the analysis in order to ensure that the codes would be understood better. The reliability of the content analysis was measured using the formula (Reliability = Consensus + Difference of Opinion) of Miles and Huberman (1994, p. 64). The codes determined by the researcher were used independently by the expert; the results were compared; and it was found out that the coding was consistent. Thus, it was ensured that coding was conducted without any bias or misunderstanding and based on a common point of view. Within the scope of the second data collection tool, students' self-assessments regarding the cooperative learning practices were determined, and *frequency (f)* and *percentage (%)* values were used in the analysis of this assessment tool.

## 3. Results

## 3.1 The Secondary School Students' Answers to the Open-ended Questions about Cooperative Learning Practices

In order to evaluate the secondary school students' opinions about the cooperative learning method applied for 3 weeks in the social studies course, 9 *open-ended semi-structured question forms* were distributed. The answers given by the students participating in the study were analyzed and coded using the content analysis method. The analysis of the answers given by the students to each question is given below.

The secondary school students' answers to the *first open-ended question (What differences do you see when you compare the lesson that we had using the cooperative learning method with the other social studies lessons?)* are given in Table 2.

Table 2. The Analysis of the Students' Answers to the First Open-ended Question

| Codes                                      | Frequency (f) |
|--|---------------|
| Ease of learning                           | 5             |
| Being enjoyable                            | 4             |
| Responsibility and taking common decisions | 3             |
| Teamwork                                   | 2             |
| Gaining skills                             | 1             |
| A difficult practice                       | 1             |
| Success                                    | 1             |
| Eagerness to study                         | 1             |

As it is seen in Table 2, the secondary school students participating in the study expressed that the cooperative learning method facilitated their learning (n = 5), made the lesson more enjoyable (n = 4), encouraged taking common decisions in the classroom and increased their responsibilities (n = 3), and instigated positive feelings about teamwork (n = 2). Also the opinions of 4 different students were as follows: the practice was more difficult compared to the previous ones; it helped them to gain skills; it increased their eagerness to study; and it helped them to be successful.

"While we are in cooperation with our friends, we understand quickly, and what we learn becomes more permanent" (S5; Ease of learning)

"I think learning through cooperation was very enjoyable. It was nice to see that my teammates felt the same." (S23; Being enjoyable)

"Everyone knows his duty. We take common decisions in cooperation" (S22; Responsibility and taking common decisions)

"In our regular lessons, there is not much cooperation and the teacher gives the lesson. But with this method, we come together with our friends and make a contribution to the lesson as a team." (S10; Teamwork)

The secondary school students' answers to the second open-ended question (What did you like about cooperative learning practices?) are given in Table 3.

| Table 3. The Analysis of the Students' Answers to the Second Open-ended Question | Table 3. | The Analysis | of the Students | 'Answers to t | he Second O | pen-ended Questio |
|--|----------|--------------|-----------------|---------------|-------------|-------------------|
|--|----------|--------------|-----------------|---------------|-------------|-------------------|

| Codes                               | Frequency (f) |  |
|-------------------------------------|---------------|--|
| Acting together                     | 6             |  |
| Cooperation and sharing             | 5             |  |
| Having fun                          | 3             |  |
| Acting freely                       | 3             |  |
| Expressing himself/herself          | 2             |  |
| Responsibility                      | 2             |  |
| Increase in classroom participation | 1             |  |
| Social interaction                  | 1             |  |

When the secondary school students' answers to the question '*What did you like about cooperative learning practices*?' were examined, the following codes were obtained: acting together (n = 6); cooperation and sharing (n = 5), having fun (n = 3), and acting freely (n = 3). Some of the actual answers given by the students participating in the study are as follows:

"I did a good job with my friends. I understood the meaning of the expression 'There is safety in numbers' (S8, Acting together)

"I liked that everyone fulfilled their responsibilities, presented their subjects to their friends, and listened to the others carefully" (S12, Cooperation and sharing)

"It was really nice and more enjoyable to learn the subjects from my friends, thus I learnt it without getting bored at all." (S4, Being enjoyable)

"It was good to be treated nicely by my friends, thus I expressed freely whatever I wanted to say about the subjects." (S13, Acting freely)

The primary school students' answers to the *third open-ended question (When you consider your relationship with your teammates during the whole process, what improvement has been made?*) are given on Table 4.

| Table 4. The Analysis of the Students' Answers to the Third O | pen-ended Question |
|---|--------------------|
|---|--------------------|

| Codes                         | Frequency (f) |
|-------------------------------|---------------|
| Bonds of friendship           | 12            |
| Communication skills improved | 4             |
| Sincere environment           | 3             |

As it is seen in Table 4, the primary school students participating in the study indicated that their friendships with their teammates were tightened (n = 12); they improved their communication skills (n = 4); and a more sincere environment was established among the friends (n = 3). Some of the answers given by the students to the third open-ended question are as follows:

"In order to be successful, everyone in the group helped one another, which made us good friends in the end." (S11, Bonds of friendship)

"Working together and teaching our friends what we know about the subject improved our speaking skills. Before this occasion, I was ashamed of speaking or making a presentation before others. However, this activity helped to suppress it." (S10, communication skills improved)

"In our classroom, there were some students whom I considered to be prejudiced but they were really good at teaching us their subjects. During this activity, we got so close that I just couldn't help sharing my opinions with them" (S12, Sincere environment)

The primary school students' answers to the *fourth open-ended question (When you compare this work with the previous social studies lessons, what differences did you observe in the classroom environment?*) are given on Table 5.

| Codes   | Frequency (f) |
|---|---------------|
| Increase in success                                 | 8             |
| Increase in participation and interest              | 5             |
| Increase in responsibility, solidarity, and respect | 4             |
| Fun   | 4             |

Table 5. The Analysis of the Students' Answers to the Fourth Open-Ended Question

As it is seen in Table 5, the secondary school students participating in the study stated that the cooperative learning method increased their success (n = 8), increased their participation and interest in the lessons (n = 5), brough the feelings of responsibility and solidarity to the forefront (n = 4), and made the lessons more enjoyable. The students' opinions regarding these codes are as follows:

"Based on what I learnt, I believe that I have become more successful in this lesson compared to the previous ones. I assume our teacher was glad about it as well." (S1, increase in success)

"We can see that a lot more students participated in this social studies lesson while the participation was very low before. This shows that everyone considered this lesson important and thus chose to participate." (S12, increase in participation and interest)

"It was a good job. The most striking difference I observed was that everyone had a duty, and every one of us felt responsible for teaching our friends." (S16, responsibility, solidarity, and respect).

"I enjoyed the lesson as much as I do physical education lessons." (S4, Fun)

The primary school students' answers to the *fifth open-ended question (How did you feel when your teammates helped you when you couldn't understand?)* are given on Table 6.

 Table 6. The Analysis of the Students' Answers to the Fifth Open-Ended Question

| Codes       | Frequency (f) |
|-------------|---------------|
| Happiness   | 11            |
| Friendship  | 8             |
| Helpfulness | 5             |

The secondary school students' answers to the *fifth open-ended question (How did you feel when your teammates helped you when you couldn't understand?)* are given in Table 6.

As can be seen in Table 6, it was found out that the students felt happiness (n = 11), friendship (n = 8), and helpfulness (n = 5) when they asked their teammates about a point that they failed to understand themselves. The students' opinions regarding these codes are as follows:

"Before, I would just ask the teacher. However, here in the group, I came to see that our opinions were more or less the same when my peers gave the answers; and seeing this made me very happy." (S2, Happiness)

"My friends asked me about the points that they couldn't understand so I explained with pleasure, which made us closer friends than before." (S, Friendship)

"We used to help one another in some lessons before, but in this activity, we both helped and enjoyed." (S, Helpfulness)

The secondary school students' answers to the *sixth open-ended question (How did you feel when you helped your friends?*) are given on Table 7.

Table 7. The Analysis of the Students' Answers to the Sixth Open-Ended Question

| Codes                       | Frequency (f) |
|-----------------------------|---------------|
| Feeling happy               | 7             |
| The beauty of collaboration | 6             |
| Feeling like a teacher      | 5             |
| Feeling proud               | 3             |
| Feeling responsible         | 1             |

As can be seen in Table 7, the secondary school students participating in the study stated that they felt happy to help one another (n = 7), stressed how nice it was to collaborate (n = 6), felt like a teacher while helping their friends (n = 5), and felt proud (n = 3). The students' opinions regarding these codes are as follows:

"I was glad when I could be of any help to others, but in any case I was very content during these works" (S2, Happiness)

"I felt glad about the collaboration within our group. I studied for them as much as for myself to make a contribution to others' success." (S11, The beauty of collaboration)

"I realized how knowledgeable and skilled I am. I explained the subject to my friends just like a teacher." (S16, Feeling like a teacher)

"When I went home, I told my mother about how I helped Samet about a point he couldn't understand. My family felt proud of me." (S15, Feeling proud)

The secondary school students' answers to the *seventh open-ended question (How did you feel when it was time for the social studies lesson?*) are given in Table 8.

| <b>Table 8.</b> The Analysis of the Students' Answers to the Seventh Open-Ended Question |
|--|
|--|

| Codes                     | Frequency (f) |  |
|---------------------------|---------------|--|
| Excitement and impatience | 14            |  |
| Happiness                 | 8             |  |
| Sadness                   | 1             |  |

It is seen in Table 8 that the secondary school students felt excited and impatient (n = 14) and happy (n = 8) when it was time for the social studies lesson that would be given through the cooperative learning method. Only one student

stated that he/she felt sad about the approaching time for the lesson. The students' opinions regarding these codes are as follows:

"I looked forward to the start of the lesson with a great excitement. At first, I was feeling tense, but in time I quickly got used to it." (S1, Excitement and impatience)

"I can say that I felt happy. Generally I would draw pictures during social studies lessons. However, this time I was happy to participate in the lesson without getting bored." (S3, Happiness)

The secondary school students' answers to the *eighth open-ended question (Do you think that each group member has equal opportunity to be successful in this work?)* are given on Table 9.

 Table 9. The Analysis of the Students' Answers to the Eighth Open-Ended Question

| Codes | Frequency (f) |
|-------|---------------|
| Yes   | 19            |
| No    | 4             |

The secondary school students' answers to the *eighth open-ended question (Do you think that each group member has equal opportunity to be successful in this work?)* are given in Table 9.

As it is seen in Table 9, 19 students of the secondary school students participating in the study stated that they thought each group member had equal opportunity to be successful in cooperative learning while 4 students said that they did not.

The secondary school students' answers to the *ninth open-ended question (Would you want this method to be applied in other lessons as well?)* are given on Table 10.

| Table 10. The Analysis of the | Students' Answers to the Ninth O | pen-Ended Question |
|-------------------------------|----------------------------------|--------------------|
|-------------------------------|----------------------------------|--------------------|

| Codes | Frequency (f) |
|-------|---------------|
| Yes   | 23            |
| No    | 0             |

As it is seen in Table 10, 100% of the primary school students participating in the study (23 students) indicated that this method should be used in other lessons as well.

#### The Self-Assessments of the Secondary School Students about the Cooperative Learning Practices

The results of the secondary school students' self-assessments about the cooperative learning method applied in social studies lessons for 3 weeks are given in Table 11.

 Table 11. Self-Assessment Questions Regarding the Cooperative Learning Practices of the Students as well as

 Relevant Percentage and Frequency Values

| No | Self-Assessment Questions  |    | Always |    | Sometimes |    | Never |  |
|----|--|----|--------|----|-----------|----|-------|--|
|    |  | f  | %      | f  | %         | f  | %     |  |
| 1  | I prepared for the lesson in advance.  | 10 | 43.5   | 11 | 47.8      | 2  | 8.7   |  |
| 2  | I collected information from different resources while preparing the presentation. | 18 | 78.3   | 3  | 13.0      | 2  | 8.7   |  |
| 3  | I fulfilled my responsibilities in the group.                                      | 20 | 87.0   | 3  | 13.0      | 0  | 0     |  |
| 4  | I did my best so that the group could be successful.                               | 21 | 91.3   | 2  | 8.7       | 0  | 0     |  |
| 5  | I listened to the opinions and recommendations of my teammates.                    | 17 | 73.9   | 5  | 21.7      | 1  | 4.3   |  |
| 6  | I spared enough time for our group work.   | 15 | 65.2   | 6  | 26.1      | 2  | 8.7   |  |
| 7  | I contributed to the presentations of the other groups.                            | 1  | 4.3    | 3  | 13.0      | 19 | 82.6  |  |

As it is seen in Table 11, 43.5% of the students stated that they prepared for the lesson in advance while 47.8% said that they "sometimes" prepared for the lesson. 78.3% of the students chose "always" for the statement "I collected information from different resources while preparing the presentations". While 87% of the students said they "always" fulfilled their responsibilities, 91.3% of the participants told that they did their best so that their group could be

successful. 73.9% of the students stated that they "always" listened to the opinions and recommendations of the other students in their group. 65.2% of the students participating in the study stated that they spared enough time for group work. While 4.3% of the students said they always contributed to the presentations of the other groups, 82.6% indicated that they "never" did.

## 4. Discussion

The present study was carried out in order to determine the opinions and self-assessments of the secondary school students regarding the cooperative learning practices applied in social studies lessons for 3 weeks. Semi-structured question form and self-assessment scale were used to gather data. The results obtained from the interviews made with 23 students participating in the study were evaluated.

In the answers the secondary school students gave to the semi-structured questions about the cooperative learning practices, they indicated that the cooperative learning method facilitated their learning in the social studies course and thus increased their success. This result is consistent with the results of many studies in the literature pointing out that students learn better through the cooperative learning method, and the knowledge acquired through this method becomes more permanent (Towns and Grant, 1997; Nhu, 1999; Yu and Stokes, 1998).

A considerable number of students stated that the social studies lessons given through the cooperative learning method were very enjoyable and funny, and they felt responsible towards their friends and participated in the lesson more actively due to the need to be always in interaction and communication with the other students. The fact that the cooperative method increases students' participation in the lesson (Açıkgöz, 1992; Aslan and Afyon, 2005; Altıparmak and Nakiboğlu, 2005; Aydın, 2009; Aydın, 2013) is underlined in other studies as well.

There were also students suggesting that they assumed responsibility for their own and each other's learning in the lessons given through the cooperative learning method, and thus they participated actively in the lesson. Furthermore, it is also understood from the interviews that the level of cooperation and sharing increased and closer bonds were formed among the friends. It was determined that the cooperative learning method provided very significant advantages to students about learning. The cooperative learning method speeds up students' learning, motivates them to learn, and keeps them active during the whole process by developing their knowledge and skills (Liang, 2002). This is because cooperative learning promotes continuous interaction and keeps alive the sense of cooperation and rivalry during the learning process (Mandal, 2009). Parveen and Batool (2012) found a significantly greater achievement in the cooperative group in comparison to the traditionally taught control group. The findings obtained in the present study are consistent with these results.

The answers given by students to the open-ended questions about the cooperative learning practices demonstrated that the cooperative learning had a positive effect on cognitive and emotional outcomes. It can be suggested that the following factors were influential on the fact that the cooperative learning method had positive effects on the *cognitive and emotional outcomes* of the students relative to those who learned via teacher-centered methods: the students were active in the lesson; they could express and discuss their ideas freely; they worked with different materials about the subject; the activities were attracting students' attention; the students liked the method; the students' communication with the teacher and their friends was good and positive; the lessons were funny and enjoyable; the exam-related concerns were very few; the students felt very comfortable in the lessons; and they learnt the subject well and contributed to the learning of one another. These results are consistent with the results of those studies which demonstrate that cooperative learning increases students' success, improves their attitude towards and motivation about the lessons, etc. (Aksoy and Gürbüz, 2012; Aydın, 2009; Ilgar and Babacan, 2012; İstemil, 2011; Le Heron, Baker and McEwen, 2006; Kuş and Karatekin, 2010; Reed and Mitchell, 2001).

When the opinions obtained within the scope of the study were evaluated, it was found out that the participants considered the Jigsaw (learning together) technique very effective especially in the teacher training process. Firstly, it is necessary to generalize this method and similar teaching methods at all levels of education. This is because students will have a lot of gains such as taking responsibility and working with a team if they work with active methods throughout their education.

In conclusion, it was found out that students enjoyed having the lesson through this approach and understood better; they noticed the importance of taking responsibility in a group; they did not need a lot of help and they did not have difficulty in their studies through this approach; they wanted this approach to be applied in their other lessons as well; they participated in the lessons more actively; their self-confidence increased in the lessons; their interest towards research increased even more; and they did not easily forget what they learnt in the lessons taught through this

approach.

As indicated in the theoretical framework of the study, one of the most important aspects of the cooperative learning is teamwork. The results of the present study demonstrated that the students participating in teamwork through cooperative method displayed a positive attitude towards both the lessons and their friends and as a result of the cooperative learning approach, the students' success increased both on individual and group levels thanks to the supportive relationships among the group members. After all, cooperative learning approach encourages students to research and develops their self-confidence accompanied by the sense of achievement and their sense of belonging to a group. When the participant students' self-assessments about the cooperative learning practices are examined, it is clear that the students generally prepared for the lesson in advance; they collected information from different resources while preparing the presentations; they fulfilled their responsibilities in the group; they did their best for the success of the group; they listened to the opinions and recommendations of their teammates; and they spared enough time for group work.

Based on the findings obtained from the present study and the experiences during the practices, the following can be recommended for implementers and researchers: It is necessary to prevent social studies lessons from being boring for students and to give coverage to classroom activities increasing the academic success of students by ensuring that they learn with a team spirit. Accordingly, cooperative learning may be applied more in social studies lessons. There is limited research on the use of cooperative learning in social studies teaching. In this regard, this gap in literature may be filled through quantitative studies (e.g. empirical research with pretest/posttest control group) and qualitative studies (e.g. in-depth analyses). In this study, the "Learning Together" technique, which is one of the cooperative learning practices, was applied. In this sense, the techniques more suitable for social studies courses may be determined by comparing the effects of different cooperative learning techniques on social studies teaching.

#### References

- Açıkgöz, K. (1992). İşbirlikli öğrenme, kuram, araştırma, uygulama [Cooperative learning, theory, research, practice]. Malatya: Uğurel Matbaası.
- Aksoy, G. ve Gürbüz, G. (2012). Effects of two different cooperative learning techniques on students' academic achievements. *Electronic Journal of Social Sciences*, 11(42), 67-78.
- Altıparmak, M. (2001). The effect of cooperative learning on attitudes to laboratory and achievement in biology education (Unpublished master thesis). Dokuz Eylül University, İzmir.
- Aslan, O., & Afyon, A. (2005). İlköğretim fen bilgisi öğretiminde işbirlikli öğrenme yönteminin öğrencilerin başarı ve tutumlarına etkisi [The effect of the cooperative learning method in physics teaching in primary school on student success and attitude]. *Selçuk Üniversitesi Eğitim Fakültesi Dergisi*, *19*, 137-155.
- Aydın, F. (2009). *Effects of cooperative learning method on the achievement, attitude and motivation at 10th grade geography course* (Unpublished doctoral thesis). Gazi Üniversity, Ankara.
- Aydın, F. (2013). Opinions and self-evaluation of the students of geography department about the applications of cooperative learning in regional geography course. *Educational Sciences: Theory & Practice*, 13(4), 2401-2418.
- Ballantine J. V. (2007). Cooperative learning. *A pedagogy to improve students' generic Skills? Education and Training*, 49(2), 126-137. http://dx.doi.org/10.1108/00400910710739487
- Buzludağ, P. (2010). The effects of teaching with cooperative learning of unit of reproduction on livings on achievement in science lesson (Unpublished master thesis). Firat Üniversitesi, Elazığ.
- Davidson, N., & O'Leary, P. W. (1990). How cooperative learning can enhance mastery teaching. *Educational Leadership*, 88(4), 30-33.
- Delucchi, M. (2006). The efficacy of collaborative learning groups in an undergraduate statistics course. *College Teaching*, 54(2), 244-248. http://dx.doi.org/10.3200/CTCH.54.2.244-248
- Ding, M. L. (2007). Teacher interventions in cooperative learning mathematics classes. *The Journal of educational research*, 100(3), 162-175. http://dx.doi.org/10.3200/JOER.100.3.162-175
- Eilks, I. (2005). Experiences and reflections about teaching atomic structure in a jigsaw classroom in lower secondary school chemistry lessons. *Journal of Chemical Education*, 82(2), 313-319. http://dx.doi.org/10.1021/ed082p313
- Gillies, R. M. (2006). Teachers and students verbal behaviors during cooperative and small-group learning. British

Journal of Educational Psychology, 76(2), 271-287. http://dx.doi.org/10.1348/000709905X52337

- Gökdağ, (2004). *Relations of cooperative learning, learning styles, academic achievement and gender in teaching social science* (Unpublished doctoral thesis). Dokuz Eylül Üniversitesi, İzmir.
- Ilgar, R. ve Babacan, Ş. (2012). The effect of multiple intelligence theory supported by cooperative learning method on achievement in teaching geography curriculum. *Hacettepe University Journal of Education, 42*, 212-224.
- İstemil, A. (2011). 9. Sınıf coğrafya dersinde kubaşık öğrenme yönteminin öğrenci akademik başarısına etkisi [The effect of cooperative learning method in 9th grade geography course on student academic success] (Unpublished master thesis). Marmara University, İstanbul.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). Cooperative learning: Increasing college faculty instructional productivity (ASHE-ERIC Higher Education Rep. No. 4). Washington, DC: George Washington University, School of Education and Human Development.
- Johnson, D. W., & Johnson, R. T. (1992). Approaches to implementing cooperative learning in the social studies classroom, cooperative learning in the social studies classroom. In R.J., Stahl ve R.L., Vansicle (Eds.), An invitation social study (87, p. 44-51). Washington National Council For The Social Studies.
- Johnson, D. W., & Johnson, R. T. (1994). *Learning together and alone: Cooperative, competitive, and individualistic learning* (4th ed.). Boston: Allyn and Bacon.
- Johnson, D. W., & Johnson, R. T. (1999). What makes cooperative learning work. In Kluge, D., McGuire, S., Johnson, D. W., & Johnson, R. T. (Ed.), *JALT applied materials: Cooperative learning*, pp. 23-36. Tokyo: Japan Association for Language Teaching.
- Johnson, D. W., Johnson, R. T., & Stanne, M. B. (2000). Cooperative learning methods: A meta-analysis. Retrieved January 5, 2008 from http://www.cooperation.org/pages/cl-methods.html
- Kaptan, S. (1998). Bilimsel araştırma ve istatistik teknikleri [Scientific research and statistical techniques]. Ankara: Tekışık Ofset 5.
- Karakoyun, M. E. (2010). The effect of one of the collaborative learning techniques, Jigsaw i, to academic success in the teaching of punctuation to elementary education 5th grade students (Unpublished master thesis). Atatürk University, Erzurum.
- Kuş, Z., & Karatekin, K. (2009). İş birliğine dayalı öğrenmenin sosyal bilgiler dersinde akademik başarı üzerine etkisi [The effect of cooperation based learning on academic success in social studies course]. Uludağ Üniversitesi Eğitim Fakültesi Dergisi, 22(2), 589-604.
- Le Heron, R., Baker, R., & McEwen, L. (2006). Co-learning: Re-linking research and teaching in geography. *Journal* of Geography in Higher Education, 30(1), 77-87. http://dx.doi.org/10.1080/03098260500499659
- Liang, T. (2002). *Implementing cooperative learning in efl teaching: Process and effects* (Master thesis). National Taiwan Normal University, Taiwan.
- Lin, E. (2006). Learning in the science classroom. The Science Teacher, 73(5), 35-39.
- Maden, S. (2011). Jigsaw tekniğinin yazılı anlatım becerisi akademik başarısına etkisi. *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*, *11*(2), 901-917.
- Mandal, R. R. (2009). Cooperative Learning Strategies to Enhance Writing Skill. *The Modern Journal of Applied Linguistics*, 1(2), 93-102.
- Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis. Thousand Oaks, CA: Sage.
- Nilsson, P., & Driel, J. (2010). Teaching together and learning together- primary science student Teacher's and their mentors' joint teaching and learning in the primary classroom. *Teaching and Teacher Education*, 26, 1309-1318. http://dx.doi.org/10.1016/j.tate.2010.03.009
- Parveen, Q., & Batool, S. (2012). Effect of cooperative learning on achievement of students in general science at secondary level. *International Education Studies*, 5, 154-158. http://dx.doi.org/10.5539/ies.v5n2p154
- Reed, M., & Mitchell, B. (2001). Using information technologies for collaborative learning in geography: A case study from Canada. *Journal of Geography in Higher Education*, 25, 321-339. http://dx.doi.org/10.1080/03098260120067619
- Saban, A. (2004). Öğrenme öğretme süreci. Yeni teori ve yaklaşımlar [Learning and teaching process. New theories

and approaches]. Ankara: Nobel.

- Safran, M. (2004). İlköğretim programlarında yeni yaklaşımlar: sosyal bilgiler (4-5. sınıf) [New approaches in primary school programs: Social studies (4-5th grades]. *Bilim ve Aklın Aydınlığında Eğitim Dergisi*, *5*, 54-55.
- Senemoğlu, N. (2001). Kuramdan uygulamaya gelişim, öğrenme ve öğretim [Development, learning and teaching from theory to practice]. Ankara: Gazi Kitapevi.
- Skell, D. (1991). Cooperative learning and elementary social studies. Social Education, 55(5), 313-315.
- Snow, D. R. (2005). *Classroom strategies for helping at-risk students*. Alexandria. VA: Association For Supervision & Curriculum Development.
- Stamovlasis, D., Dimos, A., & Tsaparlis, G. (2006). A study of group interaction processes in learning lower secondary physic. *Journal of Research in Science Teaching*, 43(6), 556-576. http://dx.doi.org/10.1002/tea.20134
- Thurston, A., Topping, K., Christie, D., Karagiannidou, E., Murray, P., & Tolmie, A. (2010). Cooperative learning in science: follow-up from primary to high school. *International Journal of Science Education*, 32(4), 501-522. http://dx.doi.org/10.1080/09500690902721673
- Tonbul, C. (2001). The effects of cooperative learning and traditional teaching methods on English achievement, satisfaction and retention and students opinions about cooperative learning (Unpublished master thesis). Dokuz Eylül Üniversity, İzmir.
- Towns, M. H., & Grant, E. R. (1997). I believe I will go out of this class actually knowing something: Cooperative learning activities in physical chemistry. *Journal of Research in Science Teaching*, 34(8), 819-835. http://dx.doi.org/10.1002/(SICI)1098-2736(199710)34:8<819::AID-TEA5>3.0.CO;2-Y
- Turaçoğlu, İ. (2011). Pre-service teachers' self evaluations towards group investigation technique. *Buca Eğitim Fakültesi Dergisi*, 31, 39-47.
- Wimmer, R. D., & Dominick, J. R. (2000). *Mass media research: An introduction*. Belmont: Wadsworth Publishing Company.
- Yıldırım, A., & Şimşek, H. (2008). *Nitel araştırma yöntemleri* [Qualitative research methods] (7. Ed.). Ankara: Seçkin Yayıncılık.
- Yu, K. N., & Stokes, M. J. (1998). Students teaching students in a teaching studio. *Physics Education*, 33(5), 282-285. http://dx.doi.org/10.1088/0031-9120/33/5/009