

# An Action Research on the Use of Collaborative Teaching Techniques\*

Sinan ARI\*\* Sabahattin CIFTCI\*\*\*

## To cite this article:

Ari, S., & Ciftci, S. (2022). An action research on the use of collaborative teaching techniques. *Journal of Qualitative Research in Education*, 29, 78-110, doi: 10.14689/enad.29.4

**Abstract:** This research aims to develop the educational process and its applications by bridging theoretical knowledge and practice with action plans prepared and implemented based on collaborative teaching methods. In addition, this research aimed to emphasize that learning together based on solidarity by coming together in line with the knowledge and skills of students can be more effective. The research was conducted in action research design, one of the qualitative research designs. In this study conducted in the 2018-2019 school year with 4th grade students of a bus school in Sarıkaya district in Yozgat and their teachers, ten lessons were initially observed before implementation and an attempt was made to understand the current situation through semi-structured interviews and observations. Then, action plans were prepared and thirty-two hours of implementation was carried out. Descriptive analysis was used to analyse the data obtained within the scope of the study, and the data obtained before and after the application were interpreted by making comparisons. According to the findings obtained at the end of the study, it was found that the use of collaborative teaching techniques in social studies classes broke the competitive classroom climate, reduced some negative student behaviors, increased interest in the classroom, and contributed to the professional development of the classroom teacher. The research will shed light on future research by transferring the experiences gained through action research into the literature.

**Keywords:** Collaboration, action research, professional development, primary school.

## Article Info

Received:  
05 Oct. 2021

Revised:  
01 Jan. 2022


Accepted:  
14 Jan. 2022


## Article Type

Research

© 2022 ANI Publishing. All rights reserved.

\* This article was produced from the doctoral thesis completed in 2020 by the first author under the supervision of the second author.

\*\*  Corresponding Author: Ministry of National Education, Yozgat, Turkey, [dr.sinanari@gmail.com](mailto:dr.sinanari@gmail.com)

\*\*\*  Necmettin Erbakan University, Turkey, [sabahattinciftci@hotmail.com](mailto:sabahattinciftci@hotmail.com)



## Introduction

The modern world, which makes change inevitable, has brought many innovations to the field of education and many other fields. Knowledge is no longer an immobile solid; it has been liquefied, actively moving in all society's events (Dewey, 2019, p. 37). In the age of information and technology, where a transformation from industrial society to information society occurs, both the object and the subject of information are human beings. Countries that produce, use, distribute, and transform information into an economy are at the forefront of international competition. In information societies founded on human beings, institutions are organized based on knowledge, and administrations are based on well-equipped people (Ince & Gul, 2006, p. 221). Countries constantly update their education systems and programs in the light of scientific developments and in line with the needs of the age.

For this reason, in education systems, a profile in which students' active participation, and learning through trials and experiences is essential, and students are not only dependent on the teacher but they also research, question, and learn has been adopted (Babadogan, 2005, p.102). The education world has moved away from the traditional approach and adopted a constructivist one. As in other countries, there has been a transformation from teacher-centred education to student-centred education in our country's education system. In environments where active learning is enabled, the teacher is a designer who gives ideas to students, directs, guides, and facilitates learning (Acikgoz, 2008, p. 34). Therefore, classroom teachers implementing the primary school programs have to renew and update themselves in the education-training processes in line with the needs.

In today's world where talent wars are taking place, a good learning environment, learning process and teaching techniques are needed to realize the purpose of the Social studies lesson. Teachers should know what teaching techniques are, and the functions and roles of these techniques (Bilen, 2010, p. 247). Because, according to Toffler, the information age is nothing but the restructuring of life (Toffler, 1992, p. 76). At this point, teachers who train the basic source and capital of knowledge should restructure their teaching methods and techniques in developing world conditions and update themselves following their professional competencies. Demirkan and Saracoglu (2016) emphasize that teachers should use student-centered, contemporary teaching techniques in their learning-teaching processes. Based on the research, Bilgili (2008) stated that using methods to make students active in classes increases academic achievement.

In active learning environments, students are able to understand, absorb, produce and use what they learn. For this, students should constantly research, establish a cause and effect relationship, question and analyze the data they obtain. While doing all these, they should cooperate with their peers by using their knowledge and skills effectively (Sonmez, 2008, p. 360). In line with these needs, many learning approaches have been developed that make the student active. One of these approaches is the collaborative learning approach. Simsek (2007) expresses this approach as a method in which students help

their peers to learn, are constantly active, increase their problem-solving power, and develop social skills while performing their own learning with heterogeneous groups towards a common purpose in a subject with heterogeneous groups in classroom and outside of the classroom.

Many definitions have been made on cooperative learning. While Demirel (2003) explains collaborative learning as a method where students learn in small groups to solve a problem with a common goal, Senemoglu et al. (2001) state that small heterogeneous groups should learn by helping each other on a scientific subject in line with a common goal. They expressed it as a method in which the learning is realized and group success is generally rewarded. Siegel (2005), on the other hand, explains it as a method in which a group of students work together for a common purpose and thus student interaction is provided. In another definition, "Collaborative learning is a classroom learning method used to increase motivation and retention, to help students develop a positive image of themselves and their friends, to develop problem-solving and critical thinking, and to encourage cooperative social skills" (Christison, 1990).

Based on the findings of other studies (Slavin & Karwein, 1981; Moskowitz et al., 1983 and Lazorowitz et al., 1985), Yilar (2015) stated in his research that the collaborative learning approach has positive effects on many skills as well as students' academic achievement. Acikgoz (1996) states that collaborative learning positively affects affective characteristics such as motivation, attitude, and anxiety, creating a positive learning environment. The benefits of collaborative learning have been listed in different ways in many scientific studies. Some of these benefits are;

Sharing knowledge and experiences in the collaboration process (Wessner & Pfister, 2007, p. 22), sharing the ideas of the groups and creating new products (Ingram & Hathorn, 2004, p. 218), ensuring peer learning (Slavin, 1987, p. 1161), integrating students with different abilities, providing intra-group interaction (Demirel, 2003, p. 124), increasing the participation of passive students in the course (Bilgin & Akbayır, 2002), and providing a high level of motivation in students (Tauer & Haravkievicz, 2004).

Primary school is the first education step in which basic knowledge and skills are acquired and the foundations of attitudes and values are laid. It is very important to know primary school students' basic characteristics and needs in the concrete operational period. These students want to move freely in learning environments, interact with their friends and participate actively in learning (Celik, 2002, p. 61). In addition, students have an active and questioning attitude rather than passivity, dealing actively in the process of problem solving, discussing with their peers and teachers (Philips & Soltis, 2005, p. 51). Yesilyurt (2009) emphasizes that collaborative learning has a significant positive effect on behaviors in cognitive, affective and psychomotor domains in his study, which examines the effect of collaborative learning on student behavior. It is stated in the updated curriculum (Turkish, Social Studies, etc.) that cooperative learning provides an environment to respect differences, to perceive differences as wealth, to share ideas freely and to form new ideas on the basis of collaboration and communication (MEB,

2017). The purpose of this study is to contribute to the professional development of teachers, on the one hand, and to examine the classroom climate created by teaching social studies in terms of cooperative learning and its effects on students, on the other. For this purpose, before and after the application; "What are the thoughts of classroom teacher on cooperative teaching techniques? How is the classroom ambiance like after the lessons taught with these techniques? What are the students' thoughts on social studies lessons taught with cooperative teaching techniques?" Some answers have been sought for such questions.

## Method

This research is designed as action research using qualitative research methods to improve the educational process and practice by bridging theoretical knowledge and practice to contribute to teachers' professional development on the one hand, and to see how the classroom climate develops when social studies classes are conducted with an understanding of cooperative learning and its impact on students on the other. Action research is applied research that treats knowledge as a form of power and lifts the line between research and social action (Neuman, 2006, p. 42). In another definition, action research is a practice-oriented research approach that aims change to improve the action within a social event (Taylor, 2002). Derince and Ozgen (2015, p.146) state that action research is commonly used in the field of education, and action researches can be made for the problems faced by administrators, counsellors, and especially teachers, in classroom practices or to improve these practices and solutions can be produced. The point on which the definitions agree is that even if there is no problem, action research is a scientific research approach that focuses on improving an existing situation, is applied, planned and carried out with systematic steps. Action research models such as Piggott-Irvine, Stringer, Kemmis, and McTaggart's model are mentioned in the literature (Gurgur, 2016). In this study, Stringer's spiral action research was used, which consists of the steps of seeing, thinking, and acting. The process in this study is shown in the figure 1.

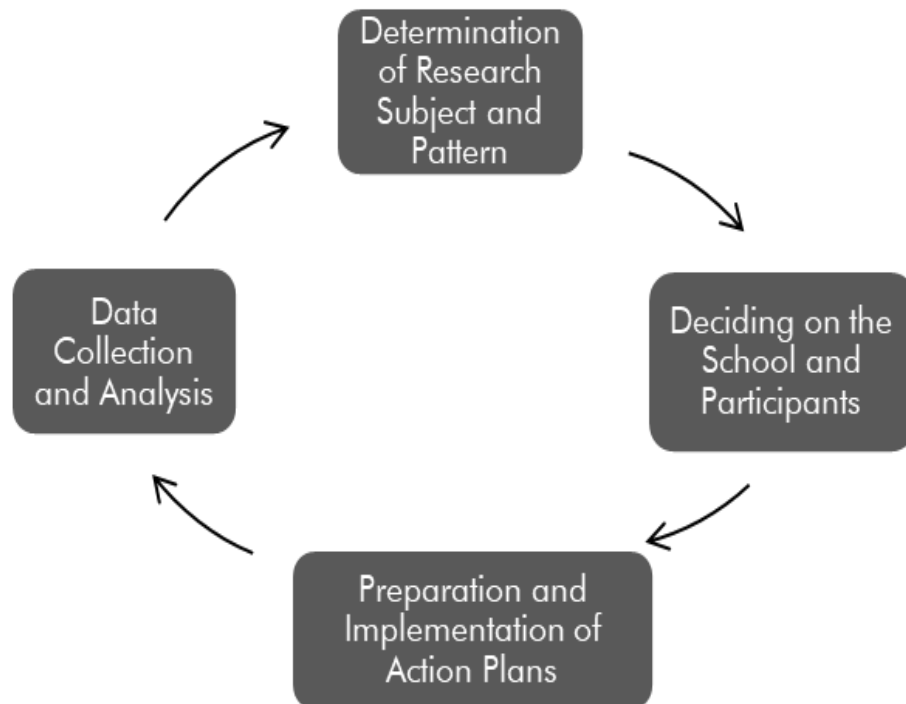
## Determination of Research Subject and Pattern

In the determination of the research topic, the researcher's determinations in the school environment where he was working, his own experiences and thoughts, as well as his interviews with competent people, especially his consultant, were effective. Since the researcher is an administrator, this issue has attracted more attention of him after what a parent told in a parents' meeting at the school. During the interview, the mother stated that her child became angry because he could not win gifts in the competitions that took place during class, that his behavior changed at home, that he became angry, that he started hitting his younger sibling at home, and that he even became delirious at night. As a result, the focus on the subject increased. The information obtained by the researcher in the Qualitative Research Patterns and Applications course during the doctoral process, the goal of action research to develop school and classroom related applications, the fact that the researcher is part of the research and is trying to solve a

problem and improve it at its core and provide the opportunity for application are the main factors that determine the "pattern" as an "action research pattern".

Figure 1.

Action Research Process



### Deciding on the School and Participants

The study group of this research consists of 4<sup>th</sup> grade students and substitute classroom teachers studying in a transportation-based village school in Sarikaya district of Yozgat in the academic year of 2018-2019. The classroom teacher has experience outside of primary school. He worked as a substitute teacher at various levels for five years. The reasons that push the researcher to his school stem from the fact that administrators and teachers in other schools avoid such practices, the researcher has detailed information about students and parents because he has been working in this school for four years and is willing to do the application himself and doing it in another school has some difficulties. In this context, easily accessible situation sampling was preferred from purposeful sampling methods in sample selection. Easily accessible case sampling is the method that gives speed and practicality to the research and in which the researcher chooses the situation that is easy to access (Yildirim&Simsek, 2006, p.113).

The study group consists of 15 girls and 10 boys. Eighteen of these students come to the school with a shuttle bus. Nineteen of the mothers are primary school graduates, 6 of them are secondary school graduates and all housewives. Eighteen of the fathers were

primary school graduates, 5 were secondary school graduates, one was high school graduate, and one was illiterate. Students and their families are socio-economically similar.

## Preparation and Implementation of Action Plans

Prior to the creation of the action plans, a series of discussions were held with the classroom teacher regarding the topics to be covered and their duration. The outcome of these discussions, the topics to be covered, the techniques to be used, and the duration of the actions are listed in the table below.

**Table 1.**

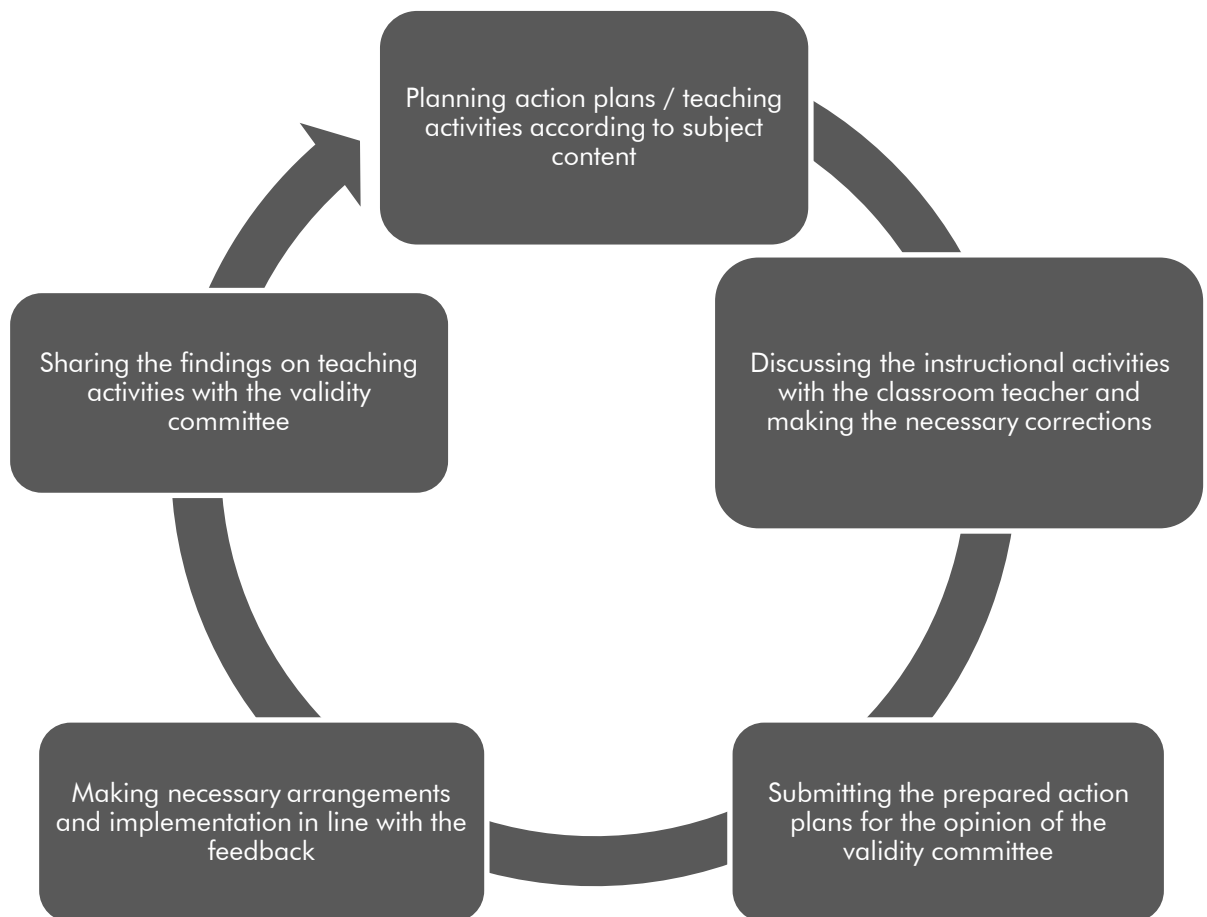
*Topics to be Covered, Techniques Used and Their Durations*

UNIT	TECHNIQUE USED	DURATION
Production Distribution and Consumption	Team Game Tournament (TGT)	12 lesson hours
Active Citizenship	Learning Together	10 lesson hours
Global Connections	JIGSAW-II	10 lesson hours

After planning the lesson, as shown in Table 1, draft action plans were prepared according to the researcher's observations and the opinions of the classroom teacher and the validity committee, deciding to make changes for new situations that might arise during implementation, and making necessary changes as needed. The validity committee consists of two faculty members from the same department and the researcher's advisor. The weekly cyclical process for preparing and implementing action plans (instructional activities) is summarized in Figure 2.

Figure 2.

*Cyclical Process for the Preparation and Implementation of Action Plans*



### Collection, Analysis and Ensuring Credibility of Data

During the research researcher diary, participant observation, student-teacher personal information forms, study and activity sheets in action plans, camera recordings, observer notes, semi-structured interviews were used as data collection tools in line with the purpose and pattern of the research. A semi-structured interview, which is widely used for data collection in qualitative research, is a method predetermined by the researcher or by which new questions can be asked according to the issues raised during the interview (Guler et al.2013, p.113). These interviews can provide both fixed-choice answers and deeper research into the relevant issue. The interviewees' opportunities to express themselves, delving into the subject, the ease of analysis, etc. are the advantages of this method (Buyukozturk et al., 2013). In accordance with the ethical rules, the necessary permissions were obtained from the interviewees and it was explained to them that the obtained data would not be used outside the research. In addition, interviewees were informed that their names would not be mentioned at any stage of the research



and that a code would be used instead. During the investigation, the students and the class teacher were asked open-ended additional questions, and depending on the course of the interview, some additions were made as needed, provided that the core of the main question was kept. This method was used especially in order to get more detailed answers from the students. The interviews were conducted one-on-one in the vice principal's room in an environment where the interviewees could be comfortable.

Descriptive analysis was used to analyse the data obtained within the scope of the research. According to Yildirim and Simsek (2006, p. 224), descriptive analysis is mainly used in studies where the conceptual structure of the research is clearly formulated in advance. The data are interpreted and summarized according to the predetermined themes or the framework revealed by the research questions. Establishing cause-effect relationships between findings and making comparisons are factors that increase the quality of interpretations. According to the explanation made by Buyukozturk et al. (2013, p. 245) in line with the explanations of McMillan, taking detailed field records in a qualitative study, providing accurate and comprehensive information by the researcher, making quotations from the participants and transferring these quotations without adding them increases the reliability. In addition, the data obtained during the research were analyzed by another expert in the field. Guler et al. (2003, p. 135) state that each of the different approaches used in qualitative research has its analysis method, but there are still many points overlapping. Based on Engel and Schutt (2005), these common points are explained in five stages as writing down the collected data, organizing the data around the main concept, revealing the relationship of the concepts with each other, legitimizing the concepts by evaluating the data, and presenting the data analysis within a certain logic. In this context, the data collected during the research process were written down, and codes were created by organizing them around thematic frames formed from the interview questions. These procedures, performed by the researcher, were also carried out by another field expert, after it was understood that they were consistent, the findings phase was initiated and care was taken to associate the findings with all the data obtained in the context of cause and effect relationship.

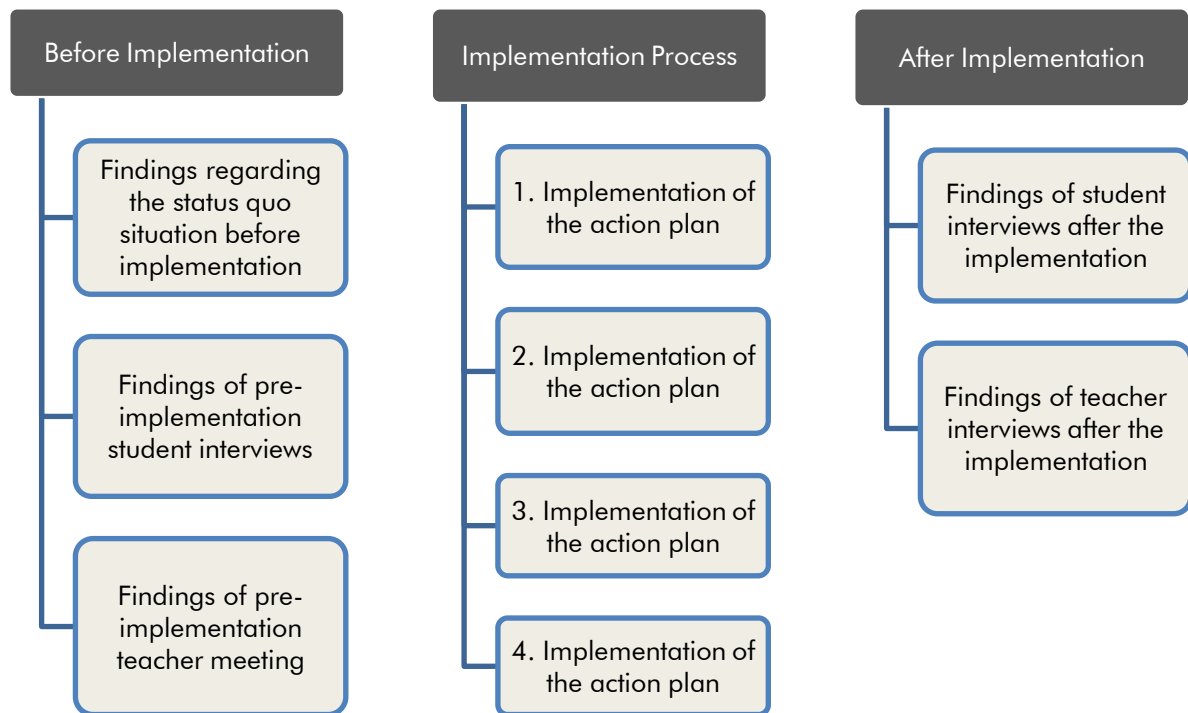
## **Results**

The research findings were presented in three categories: before the application, during the application process, and after the application. The systematic of the research findings is as follows.



**Figure 3.**

*Systematic of Research Findings*



**Findings Regarding Status quo before Implementation**

The researcher made 10-hours classroom observations for two months before the implementation and kept a diary; he took field notes and made video and audio recordings. In lesson observations, more attention was paid to the general process of the lesson, the methods and techniques used, teacher-student communication, skills such as social participation, empathy, collaboration, values such as solidarity, responsibility, love, respect, and student behavior. It has been observed that the teacher generally teaches by presentation.

In the observations made on student behavior, it was seen that the lesson was listened carefully, and the participation in the lesson was in the form of answering the questions asked by the teacher. After the teacher finishes the subject, he makes the students take notes from time to time. Considering that students like to write, writing short notes is positive for students, but apart from that, there is no environment where students will be active and participate actively. This situation is reflected in the observation form as follows:

... Naturally, students are not very active except answering questions asked by teacher or asking questions to the teacher. The students who went to the restroom in the previous lesson went out again. I observed that some of the students who were not attending class laid their heads on the

table and were almost asleep. Although there was a slight humming while the teacher was making them take notes, there were no students who did not take down notes... (Researcher’s Observation Form, 19.12.2018)

## Findings of Pre-Implementation Student Interviews

Students were first asked about their general thoughts on the social studies lesson. When the answers given were examined, most of the students stated that they liked social studies lesson and a small part of them sometimes liked and sometimes disliked it. It is important to note that most students liked the lesson because it accomplished the intended goals. With the exception of four students, almost all other students have an opinion about the content of the lesson. When students' opinions were asked about the activities in the social studies class, the activities that students mentioned most often are listed in the table below.

**Table 2.**

*Activities in Social Studies Lesson*

Theme	Codes	F ( )
Activities in Social Studies Lesson	Photocopies –worksheets	14
	Writing	14
	Multiple choice test	10
	Reading	6
	Questions-Answers	6
	Direct Instruction	4

From the students' expressions, it is understood that in the social studies lesson, the classical activities and practices brought about by teaching are generally performed, but in most of these activities, there is no situation where students will communicate and cooperate with each other. Some of the student statements are as follows;

We test with points. For example, we look for who found the bike and come, we say it the next day. While the lesson is taught, we read the texts in the book and do the activities in the book. Sometimes the teacher brings paper. There are multiple-choice questions, there are true-false, there are matching questions, there is fill-in-the-blank. (S3)

The teacher tells at first, then gives a photocopy with points about that subject. He makes us writes, he makes us take notes. (S6)

We read from the book, do the activities, solve the questions. The teacher asks us questions, we answer them. (S9)

After receiving student comments on the activities in the lesson, students were asked for their thoughts on the things they liked and disliked in the lesson. The majority of the students stated that generally there is nothing they did not like, but rather liked writing and activities performed with photocopy papers. After these reflections, the students were asked how they would like to teach the lesson. The expressions in the responses received are coded and indicated in the following table.

**Table 3.**

*Students' Opinions on How They Would Like The Social Studies Lesson to be Taught*

Theme	Codes	F ( )
Opinions of Students Regarding How They Want Social Studies Lesson To Be Processed	By making it fun (puzzle test, joke, riddle, etc.)	13
	By writing more	10
	With Games	9
	With projection	6
	By asking each other questions	6
	From the book	3
	With the teacher's explanation	3

As seen in Table 3, the students stated that they wanted the lessons to be taught by making them more fun and by writing. When the previous table is examined, it is seen that most of the students like to write. This situation reveals the consistency in the answers given by the students. Some students' views on the subject are as follows:

I want us to write more in the notebook. I want to be given puzzle tests. There is no smart board but I want lessons to be shown from the projection. I want the teacher to show by drawing on the blackboard. (S1)

Lessons should be fun and everyone should have more say. Everyone should read more. The teacher should call me to the blackboard, I like it more when I stand up and show it when we learn the right and left. Sometimes I ask questions to our teachers and sometimes to my friends, which is also nice. (S5)

By projecting on to the board. Questions and activities related to the subject we deal with should be projected. It should be fun... We should do activities, writing, games, making and presenting projects. (S16)

Each of the students has different expectations from the lessons. However, their thoughts that the lessons should be fun are seen as a common point.

**Findings about the Pre-Implementation Teacher Interview**

The researcher held a meeting with the teacher about the methods and techniques in the course and on collaborative teaching techniques, as required by the research subject. In the interview, firstly, the teacher asked a question about which methods and techniques he used in social studies lesson and how often. The teacher's answer is presented below:

Before teaching the social studies lesson, I look at the plan, I read the book; I am reviewing the book beforehand to see what subjects are there. I highlight the important places. I am planning ahead of time in my mind. I also have an auxiliary resource. I also benefit from there... I'm creating a template in my head. The subject that I will tell later is guided by what will work for children in daily life. For example, I am teaching land forms, let's say mountains, plains or maps. Before that,

it is useful to find out what this will do in daily life, let's say, when we get lost in a forest. Later, I am telling the topics, saying that we will hear and learn these for the first time. I write important headings on the board. After writing it, I explain it well. Then I ask if there is any place they do not understand, there is anything on their mind. Then I make them keep a note in their notebooks. Then I ask again if there is any place you do not understand. Then I give them a photocopy. I do gap-filling, true-false, answer tests, tests with points. Then we answer them.

The researcher posed the question of whether the teacher used another technique in order to avoid deficiencies in his explanations and received the following answer:

For example, I use the map when describing landforms and so on. Then, when I tell about a place, I say interpret the image if there is a photograph or something in the book. I use this.

From the answers given by the teacher, it is understood that a pre-lesson planning and preparation work is done, he motivates the students at the beginning of the lesson, and the lesson is usually taught through presentation and he does not use collaborative teaching techniques. Thereupon, the researcher asked the teacher what he knew about collaborative teaching methods and techniques, and which of these techniques he used and how often. The teacher answered this question as follows:

Generally, group work is done. For example, let's say we did a study about directions, namely east-west, north-south. For example, I got these done with two or three students. Someone made a drawing, someone painted, and someone wrote the directions. Like this.

In response to this answer, the researcher asked if collaborative teaching was the same as group work and received the following answer.

In the group work, students can do it themselves, but they can also benefit from the other side, but there are many sub-stages of collaborative learning. I do not use these techniques. There is no need to lie, but it works when we do group work. We make groups of three, four, and so on. Collaborative teaching has many steps, but I don't use it. I have used the diagonal method in cooperative learning several times.

It is understood from the teacher's expressions that he did not use collaborative teaching and rarely did group work. It is also seen that he has some incomplete and incorrect information on collaborative teaching. The teacher was then asked about his observations of the students, the students' interest in class, and their learning success, and received the following response:

We have students who are willing to learn. For example, I talked about the Muslim inventors in the inventions topic, but they asked if there was any Turkish among them, they questioned it. They questioned why there are always strangers. So they were not very interested in symbolic matters in general, but very interested in directions and geographic subjects. Their interest in social studies lesson is generally at a medium level. When I compare, Mathematics outweighs. In general, they listen to the lectures calmly and well. There is no problem. They help each other. I think it depends on the subject. The subject of inventions did not attract much attention among them, but the topic of landforms attracted a lot of attention. They were very interested in these, such as east-west, how we can find direction by looking at the ant, how our position concerning the sun.

The teacher thinks that the students' interest in the lesson varies from subject to subject. He stated that the students helped each other and listened well to their lectures, but based on the observations and notes of the researcher, it is seen that there was no

environment in which the students would be active. In this case, it does not seem possible to see students' skills such as collaboration, effective communication, empathy, and problem solving. Finally, the teacher was asked about the advantages and limitations of using collaborative teaching techniques in social studies lesson.

It will be useful if used. It provides effective learning, but I think the student should definitely work individually and be prepared beforehand. It enables teachers to teach students better. I think the student will learn better. But it should not be used all the time. If you do this constantly, it will be a waste of time. For example, if you always learn about a subject through cooperative learning, all the topics may not be covered up this time. I think social studies lesson should be given much importance in my opinion. It is not something that can only happen with reading. I highlight the important places. When I make them read it from the book, I make them underline some sentences because these are important.

The teacher thinks that using collaborative teaching techniques will be beneficial, but has some anxieties about time with the thought that the subjects will not be covered. In this anxiety, it is thought that the teacher's incomplete and incorrect information on cooperative teaching may have an effect.

## **Implementation of Action Plans**

Within the scope of the research, action plans were prepared based on the data obtained before the application, the interviews with the validity committee and the classroom teacher. This has been reflected in the researcher's note as follows;

...The teacher-student communication in the pre-practice lessons was mostly in the form of the students answering the questions asked by the teacher. Students often respond without being allowed to speak. Also, the students seem to be trying to outdo each other rather than learn. A collaborative environment where students can learn together is important in planning. All these situations should be discussed with the class teacher and the validity committee before the plans...  
(Researcher Note)

### **Action plan-1**

In line with the first action plan, the Team Game Tournament Technique (TGT) aims to enable students to acquire the gains of the "Production, Distribution and Consumption" unit and improve their skills such as communication individual responsibility, and positive commitment. For this purpose, the students were divided into four groups of six people. According to the technique, the teacher presents the topic and distributes study materials to the groups. Students teach each other the subjects, and at the end of the study, students at the same level from each team compete at the same table. The group with the highest score at the end of the competition is rewarded (Slavin, 1991). In line with the planning mentioned above, the first action plan was aimed to cover the subjects during 12 class hours, but a new action plan was prepared by taking the opinions of the validity committee and the classroom teacher upon the need seen at the end of 4 class hours. The reasons for preparing a new action plan are:



It was observed that there were cliques in groups of six students, which caused a lot of noise.

- It is thought that effective face-to-face communication will be stronger in groups of four students.
- The groups were found to be equivalent in terms of academic performance, but not in affective and behavioral aspects. In some groups, silent students were in the majority; in other groups, active students who increased group dynamics were in the majority. While this situation deadened some groups, it kept other groups active. -In groups of 6 students, the researcher missed the individual follow-up of the students while following the group. It will be easier in groups with fewer numbers to notice the silent and passive student within the group.
- When teaching each other's subjects, it was observed that the time was prolonged and the subjects were not covered. One of the reasons for this is probably the high number of students in the groups.

## **Action plan-2**

After the reasons as mentioned above, the remaining subjects and achievements were taught with the same technique (TGT) in eight lessons with heterogeneous student groups of four. The findings of the researcher after the lessons are as follows:

- In groups of 4, the students' communication was stronger and the students were observed more easily. It was observed that group dynamics increased and problems decreased with the formation of groups by paying attention to affective and behavioral characteristics and academic success.
- While students work more comfortably and communicate effectively during group work, this situation changes during the tournament time. Students are in a competitive mood, which can hurt the sense of cooperation.
- In a part of the study, the tournament game part of the TGT technique was carried out outside the classroom, in the school garden. Thus, it was observed that collaborative work can be applied effectively in outdoor environments.

The classroom teacher, on the other hand, expressed his views in the evaluation meeting as follows:

We saw the benefits of reducing the number of students in groups in this study. Maybe in the later stages, when the students grasp the logic of studying, the number of students in the groups can be increased. A much healthier communication was established at this stage, but it was as if the competition sense prevailed. As I said before, this situation is a habit from previous years. I guess it will take time to overcome this. I mean, some students seem to be dominant in groups, but this dominance can also make passive students active. Of course, this situation should be under the control of the teacher. Otherwise, behaviors up to fighting can be seen in students. I think it will get better in the future.



As can be understood from the classroom teacher's expressions, changing the students' habits and behaviours does not happen all at once.

### **Action plan-3**

In this action plan, not only will students be ensured to acquire the achievements of the Active Citizenship Unit using the collaborative learning technique, but also skills such as communication, ownership, positive engagement, ensuring everyone participates in group work, listening attentively to other group members, criticizing thoughts rather than people, and completing the task set in the group development will be targeted. According to this technique, teaching materials are planned to create positive commitment and distributed to groups. Desired behaviors (ensuring everyone's participation in group work, listening carefully to other group members, criticizing thoughts rather than people, doing the task given in the group) are explained. Students are directed and guided in the direction of the above-mentioned desired behaviors. Discussions are made on what was done well in group work, how effective collaboration was made, and which ones could be improved, and the lesson is concluded with feedback and evaluation (Kagan & Kagan, 2009).

In line with the planning, the "Active Citizenship" unit was taught for 10 lesson hours using the "Learning Together" technique. Here, the ratings resulting from the interviews with the classroom teacher and the validity committee are as follows:

1. Students established closer relationships, interacted more and became more active in their learning with the "Learning Together" technique.
2. During the lesson, attention should be paid to teacher guidance and time management. Teachers have great responsibilities in matters such as solving small problems that arise within the group without letting them grow and changing tasks in their distribution.
3. In this technique, it is important to make changes in student groups from time to time. Otherwise, there is a possibility that the feeling of group belonging and group cohesion due to the constant work in the same group will prevent the unity of the class. Although the students had a problem of adaptation at first, it was observed that this situation did not last long and the students got used to the new groups very quickly.
4. It is thought that students' being responsible for each other's learning in group work and performing learning in the way they want in this process strengthens students' values such as independence, diligence, solidarity and responsibility.
5. It is thought that allowing students to evaluate their strengths and weaknesses in the process of working together in group work during the evaluation process contributes to students' skills such as observation, critical thinking, and self-control.

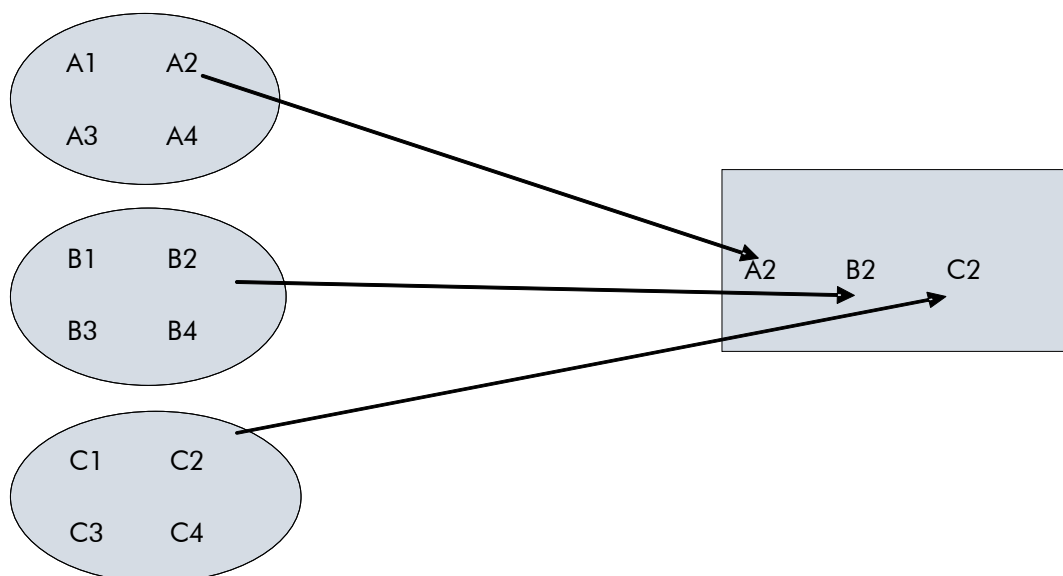
### Action plan-4

With the Jigsaw-II technique, it aims to enable the students to acquire the "Global Connections Unit" gains and improve their skills such as communication, individual responsibility, and positive commitment. In addition, it is aimed to internalize values such as peace, solidarity, equality, love, respect, responsibility and benevolence into behavior. The students were divided into four heterogeneous groups of six people for these purposes. In the Jigsaw-II technique (Kagan, 1985), the following is done:

- Subjects are divided into parts according to the number of students in the groups, heterogeneous groups are created.
- Students who take the same subject in different groups come together.
- The subject is studied in the expertise groups created, discussed in depth, and the students return to the original group after it is fully learned.
- Experts of each subject try to teach the group members their subject.
- After the students have taught all parts of the subject to each other, evaluations are made.
- Evaluation is done by both individual score and group score.

Figure 4.

Process of Creating Jigsaw Groups







In accordance with the planning, the unit "Global Connections" was taught for ten lessons using the "Jigsaw- II" technique. This resulted in the following evaluations from the interviews with the classroom teacher and the validity committee:- In the Jigsaw- II technique there were no problems while the students were working on the topics in the regular groups, but in the expert groups some problems occurred because they wanted to be in the same group with their friends and the topics were not divided according to the levels. As a result, the problem was solved with small interventions. At this point, the guidance from the class teacher is very important.-It was noticed in student studies that students communicate with each other more frequently; they can ask each other more questions and try to help. For example, while the student with low academic success could easily express the points s/he did not understand, the successful student tried to explain in different ways like a teacher.

- The students worked by having more fun and enthusiastically on subjects that are not far from daily life and are related to other lessons. During the enjoyable studying moments of the students, sometimes a noise disturbing other groups was heard, and the problem was solved with the warnings and reminders of the classroom teacher (researcher).
- -Students in group work mostly used the expressions in bold font, capital letters, underlined and italicized in the materials given while telling each other and asking questions. However, it was noticed that the students memorized and transferred the expressions on the worksheet as they were. Upon this, they were asked to express the topics they learned in their own sentences.
- In group studies, methods such as telling each other, question and answer, taking short notes, showing the important points underlined to each other, reading, and explaining were frequently used. In addition, it was observed that questions were asked at the level of knowledge and comprehension in the question-answer technique. They had difficulty asking questions at the level of analysis and synthesis. It aimed to develop high-level thinking skills by putting sample questions on the worksheets given.
- In the evaluation part, an evaluation activity prepared on the subject was applied to the students, and the results determined both the individual and the group scores. The fact that the mean scores of the groups are close to each other shows that the groups are created equal.
- During the reward, behaviors such as insulting each other, calling each other names, excessive anger, and accusations against friends between groups and within the group were observed in students. For this reason, it is believed that it is necessary to be sensitive to the issue of reward in the studies to be conducted, that behavior change is a long-term process, and that it is necessary to patiently and persistently continue the studies at each stage of such studies.

## Findings of Post-Implementation Student Interviews

Action plans were implemented in line with the planning made during the research, various evaluations were made through the researcher notes, observations, teacher interviews, meetings with the validity committee, and interviews were made with the students at the end of the process. In this way, an attempt was made to understand the effect of the process on students before and after implementation by making comparisons with other data.

**Table 4.**

### *Thoughts About the Social Studies Lesson After the Implementation*

I love it; it was a nice and fun lesson.	23
I didn't like it at first, but now I love it a little.	1
So-so, sometimes I liked and sometimes I did not.	1

Before implementation, 18 students indicated that they liked the lesson, 5 students sometimes liked the lesson, and 2 students disliked the lesson. After implementation, 23 students indicated that they liked the lesson, 1 student indicated that he did not like it before but now he liked it a little, and 1 student indicated that he sometimes liked it and sometimes did not. Some of the students who indicated that they liked the lesson made the following comments:

I love the lesson. Now I got used to social studies more, and that's why I learned more. (S1)

I love it because we learned things we didn't know in fun. As such, we were both happy and learned. (S6)

Almost all of the students (23) gave very similar answers and when the answers were examined in general, it was seen that they liked the lesson more because the lesson was fun and enjoyable. The word emphasized the most by the students who stated that they liked the lesson was "fun".

The student who said I did not like it at first but now I love it a little shared his views as follows:

It tells about our culture, tells about countries; it describes our connection with our world. It's a good lesson. Previously, the lesson would be boring, it wouldn't be smooth. Frankly, we had a very good lesson. Now I like it a little, that's why. (S25)

The thought of the student stating that he sometimes liked the lesson but sometimes did not:

Teacher, I don't like when there are difficult questions, I like when there are easy questions. That's why it's changing so, sometimes I liked it and sometimes I didn't. (S17).

When the thoughts on the activities in the social studies lesson were examined during the implementation process, all of the students stated that the activities were very nice and liked. It was observed that tournament games and competitions are the most liked in the implementations. Some of the student statements are as follows:

It was good. We spent precious time. It was fun with games and stuff. (S3)

Teacher, we are working together. It is very beautiful. We feel good when we are a group. I am happy when we work together with the activities we do, that is, I am happy. (S8)

We did group work. We learned how to teach each other in group work. (S18)

Students emphasized that they liked competitions and tournaments more during the implementation process. It is thought that the previous contestant structure in the classroom also affects this situation.

**Table 5.**

*Thoughts on Likes and Dislikes During the Implementation Process*

Theme	Codes	F ()
Likes in the Implementation Process	Contests	8
	Working with the group, sharing, learning together	9
	Activity and worksheets	5
	Evaluating each other	3
	Making presentation	2
Dislikes in the Implementation Process	No dislikes, all good	13
	Some problems experienced in group work (crying of friends, in-group discussion, not listening to each other, etc.)	9
	Long time study and some lesson subjects	3
	Making presentation	1

The students stated that they mostly liked working with the group and learning together and competitions during the implementation process. Some of them stated that they liked the activity and worksheets, while others stated they liked the opportunities to evaluate each other in the group. Some of the student statements are as follows:

Competitions and activities were good. We were generating ideas with my friends, we were telling each other; that's why it was enjoyable. (S22)

It was nice to answer the questions we asked each other. Working with friends was nice. (S21)



Of course the contests I like the most. The activities we did were very good, we enjoyed it very much. You did it so that we could learn better. Thank you. (S1)

When the dislikes during the implementation process were examined, more than half of the students (13) stated that there was not anything they did not like, and they liked all. In contrast, 9 students stated that they did not like the situations experienced in the group such as conflict between friends, not listening to each other, in-group discussion and crying. Some of the student statements are as follows:

Sometimes our group mates yell at us. Then another one cries. For example, they do tons of work, I do one thing. Then there is a dispute. (S8)

What I didn't like didn't happen much, but sometimes my friends didn't listen to me, sometimes I didn't like him. (S16)

Very difficult questions. Someone crying or something. Interrupting someone in the group. (S17)

When asked to compare social studies lessons taught together with other lessons, all of the students stated that social studies lessons were more fun in this process. They learned better than other lessons, and that these implementations could be done in other lessons. It was observed that the students, who stated that they wanted the next social studies lessons to be taught with such group work similarly, emphasized the word entertaining the most. This situation shows that children who are in the concrete operational stage in the basic education process need to learn more by having fun. Some of the student statements are given below:

Social studies lesson is better. It was fun; it was funny, competitions, games and so on. If this happens in the other lessons, they will also go well. (S4)

Other lessons are also good actually. The subjects are nice but not fun, so classic. Let it work again by forming groups, but without being too crowded. If the groups are crowded, then the problem arises. Let the group levels be equal. (S3)

Social studies lesson is better because we learn the world once. For example, when I did not understand anything, I could ask my friend. I wouldn't be able to do it alone. (S9)

Social studies are better. Studying with the group is good because when there is only one opinion, no other ideas are produced, but ideas are produced when there is another opinion. Other lessons are a bit boring compared to this lesson; we always want to do social studies lesson. (S16)

When the statements given above are examined, it is understood that there is awareness among students about working together, they can see other ideas thanks to collaboration, and there is a perception of achieving some things together.



## **Findings about the Post-Implementation Teacher Interview**

During the study, the class teacher was informed at each stage and his opinion was taken into account in the prepared action plans. The class teacher participated in class and made observations during the implementation. In addition, evaluations were made at the end of the course and his opinion was asked again as a result of the research. In the interview, he was first asked about the implementation of the collaborative teaching techniques and his opinion if he would use these techniques in the classroom. The teacher's answer is:

Dear teacher, let me state as follows: Collaborative teaching techniques are absolutely essential. So mutual learning is a good thing, but children need to be prepared for it beforehand. For example, in primary schools, it is necessary to inform children about this issue in advance because when we start practicing, it seems like a game to children at first, it doesn't matter for them. Children should be ready first. Of course, we are lacking of it here. We have never done this kind of practice before. However, even if not in all lessons, such practices can be done from time to time. Thanks to this study, we have seen that it can also be done. I think it will be very difficult in crowded classrooms. I believe it will bring success in situations where the class population is low. Also, I definitely realized that lectures should not be taught with just lectures. Because after a certain period, everything becomes stable. So this is true not only for students, but also for us teachers. We shouldn't make the lessons monotonous. For this, I think we must show the courage to renew ourselves. As we discussed in our previous interviews, some of our fellow teachers may avoid participating when they encounter such studies. However, even if we knew these things before, at least in theory, we can forget over time. In this regard, it was a productive study not only for the students but also for me. In this respect, I would like to thank you as well. I would also like to state that in the next period, I will include such practices, even if not always, in the lessons.

After his remarks, the teacher was thanked for this approach and his contributions. His opinions on the benefits and limitations of using collaborative teaching techniques in the social studies classroom and teaching with an understanding of collaboration for both teachers and students were then solicited, and the responses are reproduced below:

Children first learn to share, learn to help each other; they express themselves better. For example, okay, the student is successful but s/he doesn't help her/his friend. This is not a desired situation. We want them to be good both in success and morality and behavior. Then the students' harsh expressions towards each other softened considerably. This situation is noticed even from the sentences used by children. I think this is the biggest advantage. Students are more understanding to each other. The children's desire to class increased; I feel that they will be more successful in the future. Class attendance increased. By using these techniques occasionally, the course can be prevented from being ordinary. If it is not planned well, there may be a lot of time loss, the subject may not be covered, but it can be used, depending on the subject. Telling with this technique constantly may cause the subject not to be finished and lessons may prolong. In this respect, we need to plan well. Children's readiness is also very important in order to use this technique effectively. For example, when asked about Turkey's neighboring countries, "Yozgat," says the student. He is not even aware that Yozgat is a province. I think we cannot use these techniques



very effectively in such a situation. In other words, after the basics are laid, peer support will be better with the understanding of cooperation. That being said, it can be a time issue for teachers. In classrooms where teachers are not good at classroom management, there may be a lot of noise. There is mobility, after all, which requires good classroom management. Then it can be applied outside of the classroom, as you do in the tournament game. This can be used to attract and motivate students. In other words, communication and changes in students can be observed better with these techniques in general. For example, the situation of the student in group work and working with others can be evaluated. I think this can be a way to get to know the student better.

During the implementation process, the students were asked to make an assessment on their observations about the classroom climate and whether there was a change. Considering the interviews made with the classroom teacher before the implementation, it was understood that he had incomplete information on collaborative teaching techniques and did not use these techniques, but after the implementation, it was seen that the teacher became aware of it, his perspective on collaborative teaching changed and he wanted to use it in his lessons. Thereupon, the teacher made the following explanations:

I can say that it was partially successful for my own class. That is, in the last year, competitions were held repeatedly in class, bringing to the fore the personal-individual ambitions of the children. Their thoughts were like: I always want to win, be the first; I do everything. Therefore, there was a decrease in the feelings of sharing. The children were already saying this situation themselves. That is to say, there was an atmosphere of uneasiness in the classroom arising from individual-based competitions; they upset with each other, like you came first, I could not be, but mutual sharing is the basis of collaborative learning. At first, the children kept the information to themselves, and that was for reasons such as why, I'll be the first in the group, I'll take the gift. At first, the children did not embrace each other much, but now I see a change in the children. Recently, children have become more active in conveying information, sharing, and helping each other. Still, it can turn into individual ambition again due to reasons such as group championship and ambition. Despite this, the sharpness of the children's behavior towards each other also decreased. In this sense, it was very nice and useful. Considering that they have always grown up with the desire to be at the forefront on an individual basis, I think the point we have reached is quite good. Of course, the students' negative behaviors we talked about are not completely over. But at least that sharpness is less obvious. Frankly, I feel the reflection of this in other lessons as well. At least I think that the 'always me' understanding we see in successful students is broken. They realized that it wasn't just themselves. It has also been good for academically poor students. That is to say, they tried to make their contribution for a purpose; they saw that they were useful to something. It is actually here in all matters. Seeing themselves as part of a group and feeling precious. I think they will learn the subjects somehow in the future. But of course, it should not go without mentioning that the interest in the lesson has also increased.

From the teacher's expressions, it is understood that the social studies lesson, which is taught with collaborative teaching techniques, is effective in creating a positive classroom climate. It has been stated that the students were more understanding towards each



other and this situation was felt not only in social studies lessons but also in other lessons, and generally positive opinions were expressed about the study.

## **Discussion Conclusion and Recommendations**

First of all, before the action plans (teaching activities) are implemented, the students should be informed about the implementation and what is aimed with it should be explained. In action researches, active participation of the participants (those about whom data is collected), as well as those that may be affected by the results of the research, is important because the participants are directly involved in the research process as part of the research team (Buyukozturk et al., 2013, p. 20). Action research is transformative social learning with a change agenda. It shapes the world with others in a more desired direction. For action researchers in education, the practice/inquiry combination at the heart of the work aims at making a situation such as a classroom or whole school system better by responding to the continuous need for development or change (Bradbury et al., 2019, p. 7). Accordingly, before the research process, the school administration, classroom teachers, students, parents, school elements of the school and all the elements were informed. It was observed that the participants were informed in detail and consciously acted and worked willingly throughout the research.

Secondly, action plans should be changed without hesitation when deemed necessary, and new action plans should be prepared by making necessary adjustments in line with the needs because action researchers are insider researchers. They see themselves as part of the situation they are exploring and they ask "Is things going the way we want, and how can we improve it when needed?". This is what makes action research different (McNiff & Whitehead, 2006, p. 8). In this context, a new action plan was developed and implemented as part of the research, as the first action plan had shortcomings. With the decrease in the number of student groups in the new action plan, the researcher's individual follow-up of the students became easier, in-group cliques were prevented and student communication became more effective.

The third important point is that success in educational processes should be seen as academic success. To be seen as academic success but to be seen as academic success. The meaning attributed to success should go beyond quantitative data. Especially in basic education, the concept of success should not be based on the failure of others, but on the principle of togetherness. In this study, the reflection of the principle of togetherness with collaborative teaching techniques was seen with the breaking of the competitive classroom climate. Butera and Swiatkowski (2020), in their study examining competition in education, stated that a series of anti-social behaviors such as cheating and bullying



appear to be the result of competitive class structures and competitive values. It should not be forgotten that situations, where only academic success is prioritized, may cause irreparable results in the future. J. Krishnamurti (2012, p. 17), who was elected as the "world teacher" by the Theosophical Society at the age of 13, expresses this situation as follows: "The man who knows how to split the atom but has no love in his heart becomes a monster."

Similarly, Barskanmay (2020) in an article on success, states that success has become a kind of fetishism, referring to sociologist and writer Elias Canetti's saying "Success, the rat poison of mankind..." In the same article, the author states that, with the perception created, children with low academic achievement are seen as plague by both school and society, and their self-esteem is destroyed. In addition, he emphasizes that children are pushed to inhuman ways like "Success justifies all means," for the sake of being successful. At this point, students mustn't feel valued for their academic success by their families or teachers. Right here, Yavuz in his book (2020, p.88) states that a high school student saying "even my mother's hugs change when I get full marks in the test" is still ringing in his ears, and today people are subjected to a lot of success-oriented guidance in both school and home environments and people has zero tolerance for failure, even for themselves.

In the observations made before the implementation of the study, although their academic success was high, it was observed that some students displayed behaviors such as not sharing a simple article with a friend, hating the classmate who is at the top of the class, and crying out of fury. Considering that this situation is seen in children who are at the beginning of the road, the gravity of the situation will be better understood. Especially in the MEB 2023 Education Vision, these issues were emphasized, and the union of mind and heart was emphasized (MEB, 2018). The research was especially built on these points, and the students were mostly studied within this framework. In this context, together with academic success, values such as love, respect, solidarity, effective communication, cooperation, and social participation skills were emphasized. It was emphasized that every student's contribution is important, especially during the evaluation of group work. At the end of the study, it was understood from the teachers' expressions and observations that there was a decrease in these negative behaviors observed in students with good academic success.

In the interviews with the students after the implementation, the students stated that they wanted the lessons to be fun. In the positive environments that occurred, it was observed that the students approach the activities in the lessons more eagerly and with interest. By looking at many studies, Yildiz (2019, p. 47) states that the positive brain works 31% more efficiently, children will be successful if they are happy, and if they are successful,



they will work harder. In this context, it is thought that both happy and successful individuals will be reached with collaborative education. In a study, Bolat (2012) states that there is no difference between successful and unsuccessful students in terms of studying hours, intelligence level, paying attention to the lesson or class participation. The difference lies in the fact that none of the unsuccessful students do group work. Successful students first studied individually and did group work in the evening. In the same article, the author emphasizes that the feeling of competition often hurts people and that the students studying in the group learn about collaboration, not competition. On a collaborative classroom environment, Holt (2019, p. 71) used the following statements:

Then the kids formed a collaborative classroom, and then they taught me how to create a classroom that helps each other, teaches each other, and learns from each other. All I did here was to let them be themselves, I learned this by taking the time and space to see and be content for what will happen, and let the children see my satisfaction with what happened.

In this study, it was understood from the teachers' opinions and observations that students noticed the negative effects of the feeling of competition on them and that these students tried to behave more understanding towards their friends.

The fourth important point is that in many studies conducted, there have been results such as students getting bored and the interest in the lesson dropped in classrooms where an active learning environment is not created (Firat Durdukoca 2018, Demir and Ozden 2013, Utkur 2016). Before implementing this research, two students (S2 and S8) asked for permission to go to the toilet continuously during the lesson, but did not go out in any lesson during the practice process. From the interviews with other students before the implementation, it is understood that the students liked mobility rather than stagnation. Therefore, when classroom teachers can create an active learning environment where students can work together, it is thought that student requests such as going to the toilet unnecessarily during the lesson will end.

Fifth, collaborative teaching techniques should be put to work more often. According to the results of this study and many other studies on collaborative teaching techniques;

-With a collaborative learning environment, when students learn together in a group, when they consider their friends' ideas, when they value their friends, they develop (Karakus, 2020; Yildirim, 2010), in critical thinking (Uysal, 2009), in communication (Soysal, 2019), in democratic attitudes (Yilar, 2015; Shirtless, 1993), in problem solving (Serin, 2014; Altinkok, 2012; Uysal, 2010; Genc, 2007), and in other social skills (Araz, 2019; Palak, 2018). Especially after the Covid-19 process, in which students have to move away from each other, it will be beneficial in developing these skills to use collaborative learning.



Collaborative learning increases academic achievement and ensures permanent learning (Senturk, 2020; Durna, 2019; Alici, 2019; Celik, 2017; Koc, 2014; Akar, 2012). Throughout the research, students who studied in collaborative groups were able to be a part of the whole and realize their responsibilities in success and failure. It was observed that students who were not willing to study under normal conditions made an effort not to decrease group success.

Collaborative learning greatly impacts the acquisition of values such as responsibility, benevolence, respect for rights and freedoms (Kucukurtgut, 2018; Tarlakazan, 2010). One of the educational philosophies of the German educator Froebel is explained as follows: "The primary business of school is to train children in co-operative and mutually helpful living. It is to foster their understanding of cooperation and solidarity, and to help making the adjustments that will carry this spirit into overt deeds." (Dewey, 2019, p. 93).

Sixth, following the teaching, which is defined as a special profession in the National Education Basic Law No. 1739, teachers should constantly update and improve themselves by following the developing conditions. These issues shouldn't be considered only as a means of appointment in the Public Personnel Selection Examination (KPSS) process and what has been learned should be used. In a study conducted on the primary school teaching field knowledge exam, experts stated that these exams were insufficient to meet the need for qualified classroom teachers and measure the general teaching profession and the special field teaching competencies (Ari & Unal, 2016). In Finland, one of the countries shown as an example in educational success, the criteria such as teamwork, love for the profession, character and communication skills are sought as criteria in the selection process of teacher candidates (Bolat, 2018). The teachers chosen to update themselves by eliminating their deficiencies and are in constant development and change.

From the interviews made with the classroom teacher before the application, it is understood that direct instruction teaching method is generally used in social studies lessons, and collaborative teaching techniques are not used. This situation is reflected in the classroom as a teacher-learner model. However, in the literature on the subject, the role of teachers in guiding learning and preparing an active learning environment is now emphasized (Acikgoz, 2008, p. 34; Bilen, 2010, p. 247; Toffler, 1992 p. 76; Demirkan & Saracoglu, 2016). In the interview with the classroom teacher after the application, the classroom teacher stated that he now saw the positive reflections of the collaborative teaching approach; he definitely noticed its importance, would show the courage to renew himself and would like to use these techniques in the lessons. Reagan (2019), citing teacher professionalism criteria professionally, states the content of these criteria as follows:



- Based on subject area and pedagogical formation knowledge,
- In-class practical and empirical knowledge-based,
- Personal and collective expertise authority on issues such as curriculum, evaluation and decision-making,
- Professional ethical rules system,
- Commitment to continuous personal and professional development.

As a result of the above, it can be said that teachers who take the responsibility of teaching new skills and values to the whole society and especially to students in the long run should constantly update themselves by restructuring their teaching methods and techniques according to the evolving conditions in the world. The seventh important point is that the understanding of cooperation should prevail instead of competitive understanding in the education and training process. Many authors worry that the competitive environment can push people towards a continuous competition and winning-oriented understanding. (Covey, 2019, p.10; Gatto, 2016, p.165; Krishnamurti, 2012, p.68). During this study, it was observed that the competitive environment caused aggressive and combative behaviors in ambitious students. This situation was reflected in the quiet and timid students and caused a kind of oppression in those students. While such problems are frequently seen in TGT technique, these problems are encountered less in learning together and Jigsaw-II techniques.

In a study examining knowledge contests in the context of competitive education, most of the students focused on "winning" and "competition" phenomena instead of "learning" and most of the students who had positive opinions about the competition before the competition changed their opinions negatively after the competition. In the same study, it was found that some of the students who lost the competition had feelings such as greed and revenge; at the end of the competition, it was determined that both the winners and the losers were upset (Okmen, Sahin, Boyaci & Kilic, 2019, p. 253).

Care should be taken not to drag the games and group evaluations made in the studies using collaborative teaching techniques into an atmosphere of competition and rivalry. Care should be taken to emphasize behaviors, not personalities, in evaluations. Especially in environments where academic success is blessed, only this success is appreciated and other achievements are ignored; children may exhibit erroneous behaviors in order to get in the eyes of their social environment (their families, teachers, etc.). This situation was frequently observed in the observations made before the implementation of the study. Moreover, these types of problems occurred more frequently with the TGT technique than with the shared learning technique. The



perception of the tournament in the TGT technique as a competition is the main factor for this. In this respect, students must grow up to feel positive attachment to each other in collaborative learning environments without seeing each other as rivals.

The eighth important point is that “rewarding”, which is frequently used in education and training, should be used very carefully. If a reward used with good intentions is not used correctly, it may cause undesirable behaviors to occur and reinforce (Bolat, 2017). During the research process, various affective and behavioral problems were observed on both the winning and the losing sides during the research process. During the rewarding process, emphasis is placed on the students' ability to study together, and by explaining how the winning group deserves the reward, these problems can be alleviated. In this context, it is thought that it is necessary to focus on the issue of rewarding in the implementation of collaborative teaching techniques.

Ninth, with this study, the classroom teacher noticed his shortcomings, learned new things in the implementation process and had the opportunity to improve himself. At this point, at the end of the research, action research should be strengthened, where teachers are part of the research to improve its applications in the classroom. This is because action research is a systematic research approach that enables people to find effective solutions to the problems they face in their daily lives. Unlike traditional experimental/scientific research that seeks generalizable explanations that can be applied to all contexts, action research focuses on specific situations and local solutions (Stringer, 2007, p.1).

Moulin (2018, p. 229) says that Tolstoy's experimental school can be seen as a precursor to traditions in educational research that seek to understand children's experiences, as well as “practitioner” or “action” research, in which teachers are encouraged to change, explore, and evaluate the impact of their teaching practices. In this context, teachers who take part in scientific studies such as action research can be a part of the solution in the practices and difficulties encountered in the teaching process, as in this study.

As a result of the experiences gained throughout the research, the following recommendations can be made for practitioners and researchers:

1. In-service training can be organized to correct misinformation in teachers, which is the most important factor in the teaching process, and to complete missing information.
2. The meaning attributed to success can be examined through the eyes of families, classroom teachers and students, and a comparative analysis of these can be made.



3. Longitudinal studies on competitive and collaborative classroom environments can be conducted to reveal their reflection on students in more detail.
4. Studies on the reward can be diversified, and its advantages and disadvantages can be discussed.

**Ethics Committee Approval:** This research followed the protocols set by the Necmettin Erbakan University of the Ethics Review Committee (ERC). However, since the research was produced from the thesis of the author S.A. titled "An Action Research On The Use Of Cooperative Teaching Techniques In Social Studies For 4th Graders" in 2020 and there was no need for ethics committee approval for doctoral theses in that year, ethics committee approval was not available for this study.

**Informed Consent:** Informed consent was obtained from the participants.

**Peer-review:** Externally peer-reviewed.

**Authors' Contributions:** Concept –S.A., S.Ç.; Design –S.A.; Supervision –S.Ç.; Data Collection and Processing –S.A.; Analysis and Interpretation - S.A., Literature Review –S.A.; Writing –S.A ; Critical Review –All authors.

**Conflict of Interests:** The authors have no conflict of interest to disclose.

**Financial Disclosure:** The authors declared that this study has received no financial support.

## References

- Acikgoz, K. U. (1996). *Etkili ogrenme ve ogretme*. Kanyilmaz Matbaasi.
- Acikgoz, K. U. (2008). *Aktif ogrenme* (10. baski). Bilis Yayıncılık.
- Akar, M.S. (2012). *Fen ve teknoloji ogretmenlerinin is birlikli ogrenme modeli hakkında bilgilendirilmesi, bu modelin sinifta uygulamalari ve elde edilen sonuclarin degerlendirilmesi: Kars il ornegi* (Yayımlanmamis doktora tezi). Ataturk Universitesi.
- Alici, B. (2019). *Jigsaw IV tekniginin 4. sinif Fen bilimleri dersinde ogrencilerin akademik basarisina ve kaliciligina etkisi* (Yayımlanmamis yuksek lisans tezi). Firat Universitesi.
- Altinkok, M. (2012). *Is birligi ile ogretim yontemine dayali beden egitimi derslerinin 9-10 yas grubu cocuklarin temel motor becerileri ile problem cozme becerilerinin gelismine etkisinin arastirilmesi* (Yayımlanmamis doktora tezi). Marmara Universitesi.
- Araz, H. (2019). *Jigsaw ve birlikte sorulim birlikte ogrenelim yontemlerinin ogrencilerin akademik basarilarina ve duyussal gelismelerine etkisi* (Yayımlanmamis yuksek lisans tezi). Ataturk Universitesi.
- Ari, S. ve Unal, E. (2016). An examination of the content knowledge exam for classroom teaching in accordance with the opinions of the branch experts. *Collage Student Journal* 50 (4), 569-579.
- Babadogan, C. (2005). Stil odakli ogretim ve ders tasarimi. *Ozel Okullar ve Egitimde Yeni Yaklasimlar Sempozyumu*. (ss. 99-112). Antalya.
- Barskanmay, A. (2020, Agustos 27). Basari bir sehvettir. *Karar*. <https://www.karar.com/basari-bir-sehvettir-1582286>
- Bilen, M. (Ed.). (2010). *Ogretim, ogretme yontemleri. Egitimde ilke ve yontemler*. Betik Kitap.
- Bilgili, S. (2008) *İlkogretim 7. sinif fen ve teknoloji dersinde cevre konularinin ogretiminde, yapilandirmaci yaklasima dayali is birlikli ogrenmenin ogrencilerin erisine etkisi* (Yayımlanmamis yuksek lisans tezi). Gazi Universitesi.
- Bilgin, T. ve Akbayir, K. (2002). Is birlikli ogrenmenin dizi ve serilerin ogretimindeki etkililigi. V. *Ulusal Fen Bilimleri ve Matematik Egitimi Sempozyumu*. (s.s 933-938). Ankara.
- Bolat, O. (2012, Subat 23). Is birligi ogrenmeyi ve basariyi artirir mi? *Hurriyet*. <https://www.hurriyet.com.tr/isbirligi-ogrenmeyi-ve-basariyi-artirir-mi-19979341>
- Bolat, O. (2018, Temmuz 21). Finlandiya'dan egitim adina ne ogrenebiliriz? *Hurriyet*. <https://www.hurriyet.com.tr/yazarlar/ozgur-bolat/finlandiyadan-egitim-adina-ne-ogrenebiliriz-40903821>
- Bradbury, H., Lewis, R. ve Embury, D.C. (2019). Education action research: with and for the next generation. C.A. Mertler (Ed.) *The wiley hand book of action research in education*. John Wiley&Sons Inc. Published.
- Butera, F., Swiatkowski, W., & Dompnier, B. (in press). Competition in education. In S. Garcia, A. Tor, & A. Elliot, (Eds.), *The Oxford handbook on the psychology of competition*. Oxford University Press.
- Buyukozturk, S., Kilic Cakmak, E., Akgun, O. E., Karadeniz, S., ve Demirel, F. (2013). *Bilimsel arastirma yontemleri*. Pegem Akademi Yayıncılık.
- Christison, M.A. (1990). Cooperative learning in the EFL classroom. *English Language Teaching Forum*, 28, (4). 139-147.
- Covey, S. R. (2019). *Etkili insanlari 7 aliskanligi* (63. baski.). (O. Deniztekin ve F. N. Deniztekin, Cev.). Varlik Yayinlari.
- Celik, V. (2002). *Sinif yonetimi* (1. baski). Nobel Yayin.
- Celik, E. (2017). *Cebir ogrenme alaninda probleme dayali isbirlikli ogrenmenin akademik basariya etkisinin incelenmesi* (Yayımlanmamis doktora tezi). Ataturk Universitesi.
- Demirel, O. (2003). *Ogretimde planlama ve degerlendirme ogretme sanati* (6. baski). Pegem A Yayıncılık.
- Demir, S. ve Ozden, S. (2013). Sinif ogretmenlerinin ogretimsel stratejilere yontemlere ve tekniklere iliskin gorusleri: Hayat bilgisi dersine yonelik tanilayici bir calisma. *Pamukkale Universitesi Sosyal Bilimler Enstitusu Dergisi*, 14, 59-75.
- Demirkan, O. ve Saracoglu, G. (2016). Anadolu Lisesi ogretmenlerinin derslerde kullandiklari ogretim yontem ve tekniklerine iliskin gorusleri. *The Journal of International Lingual, Social and Educational Sciences*, 2(1), 1-11.

- Derince, Z. M. ve Ozgen, B. (2015). Eylem arastirmasi. F. N. Seggie ve Y. Bayyurt (Ed.), *Nitel arastirma yontem, teknik analiz ve yaklasimlari* (s.146-162). Ani Yayıncılık.
- Dewey, J.(2019). *Okul ve toplum* (6.baski). (H.A. Basman, Cev.). Pegem Akademi Yayınevi.
- Durna, İ. H. (2019). *Sosyal bilgiler dersinde Jigsaw tekniği kullaniminin öğrenci başarısına, bilgilerin kalıcılığına ve derse karşı tutuma etkisi* (Yayımlanmamış yüksek lisans tezi). Akdeniz Üniversitesi.
- Efe, R., Hevedanlı, M., Ketani, S., Cakmak, O., ve Aslan Efe, H. (2008). *İs birlikli öğrenme teori ve uygulama*. Eflatun Yayınevi.
- Engel, R. J., & Schutt, R. K. (2005). *The Practice of Research in Social Work*. SAGE.
- Firat Durdukoca, S. (2018). Sınıf öğretmenlerinin sosyal bilgiler dersi öğretim uygulamaları için öğretim tekniklerinin seçimine yönelik yeterlik algıları ve görüşleri. *Türkiye Sosyal Arastirmalar Dergisi*, 22 (1),212-242.
- Gatto, J.T. (2016). *Egitim: Bir kitle imha silahı*. (M.A. Ozkan, Cev.). Edam Yayıncılık.
- Genc, M. (2007). *İs birlikli öğrenmenin problem çözmeye ve başarıya etkisi* (Yayımlanmamış doktora tezi). Marmara Üniversitesi.
- Gomleksiz, M. (1993). *Kubasık öğrenme yöntemi ile geleneksel yöntemin demokratik tutumlar ve erişime etkisi* (Yayımlanmamış doktora tezi). Cukurova Üniversitesi.
- Guler, A., Halicioğlu, M. B. ve Taşgin, S. (2013). *Sosyal bilimlerde nitel arastirma*. Seckin Yayıncılık.
- Gurgur, H. (2016). Eylem arastirmasi. A. Saban ve A. Ersoy (Ed.), *Egitimde Nitel Arastirma Desenleri içinde* (1-48). Ani yayıncılık.
- Holt, J. (2019). *Cocuklar neden başarısız olur?* (F. Safak, Cev.). Beyaz Yayınları.
- Ingram, A. L. ve Hathorn, L. G. (2004). *Methods for Analyzing Collaboration in Online Communications*. In T. S. Roberts (Ed.). *Online collaborative learning: Theory and practice* (pp. 215-241). Idea Group Publishing.
- Ince, M. ve Gul, H. (2006). Bilgi çağında rekabetin temel belirleyicisi: bireyin yaratıcılığı. *Selçuk Üniversitesi Karaman İ.İ.B.F. Dergisi*. Haziran, 220-234.
- Kagan, S. (1985). Dimensions of cooperative classroom structures. In R. Slavin, S. Sholomo, S. Kagan, R.H. Lazarowitz, C. Webb ve R. Schmuck (Ed.) *Learning to cooperate, cooperating to learn*. Plenum Press.
- Kagan, S. & Kagan, M. (2009). *Kagan cooperative learning*. Kagan Publishing.
- Karakus, G. (2020). *İsbirlikli problem çözme öğretim programı tasarısının hazırlanması ve uygulanması* (Yayımlanmamış doktora tezi). Afyon Kocatepe Üniversitesi.
- Koc, Y. (2014). *Fen ve teknoloji öğretmenlerinin is birlikli öğrenme modeli hakkında bilgilendirilmesi, bu modeli sınıfta uygulamaları ve elde edilen sonuçların değerlendirilmesi: Agri il örneği* (Yayımlanmamış doktora tezi). Ataturk Üniversitesi.
- Kucukturgut, B. (2018). *Sosyal bilgiler dersinde sorumluluk, yardımseverlik, hak ve özgürlüklere saygı değerlerinin kazanımında is birlikli öğrenme modelinin etkisi* (Yayımlanmamış doktora tezi). Ataturk Üniversitesi.
- Krishnamurti, J. (2012). *Egitim ve yasamin anlami* (A. Acikgoz, Cev.). Omega Yayınları.
- Lazarowitz, R., Baird, J.H., Hertz-Lazarowitz, R. & Jenkins, J. (1985). Learning to cooperate, cooperating to learn. In R. Slavin, S. Sharan, S. Kagan, R.H. Lazarowitz, C. Webb & R. Schmuck (Eds.), *The effects of modified Jigsaw on achievement, classroom social climate, and self-esteem in high-school science classes*. (pp. 231-253).
- Mc Niff, J. ve Whitehead, J. (2006). *All you need to know about action research*. Sage Publications.
- Millî Eğitim Bakanlığı [MEB]. (2017). *Mufredatta yenileme ve degisiklik calismalarimiz uzerine*. MEB Yayınları.
- Millî Eğitim Bakanlığı [MEB]. (2018). *2023 eğitim vizyonu*. MEB Yayınları.
- Moskowitz, J. M., Malvin, J. H., Schaeffer, G. A. & Schaps, E. (1983). Evaluation of a cooperative learning strategy. *American Educational Research Journal*, 20(4), 687-696.
- Moulin, D. (2018). *Egitici Tolstoy* (O. Akcay, Cev.). Hece Yayınları.
- Neuman, W.L. (2006). *Toplumsal arastirma yöntemleri, nitel ve nicel yaklasimler* (İ.Cilt). (S. Ozge, Cev.). Yayın Odası Yayıncılık.

- Okmen, B., Sahin, S., Boyaci, Z., ve Kilic, A. (2019). Rekabete dayali egitim anlayisi baglaminda bilgi yarismalarına bakis. *Egitimde Kuram ve Uygulama*, 15 (3), 253-266.
- Palak, T. (2018). *İlkokul 4. sinif Sosyal bilgiler dersinde kullanılan isbirliğine dayali öğrenme yöntemi birleştirme tekniğinin öğrencilerin sosyal becerilerine ve akran zorbalığına etkisi* (Yayımlanmamış yüksek lisans tezi). Marmara Üniversitesi.
- Philips, D. C. ve Soltis, J. F. (2005). *Oğrenme: perspektifler* (S. Durmus, Cev.). Nobel Akademi Yayıncılık.
- Reagan, T. (2019). Öğretmenliğin mesleki statusu (B. Soylemez, Cev.). H. Under (Ed.) *Eğitim felsefesi kılavuzu* (s. 205-219). Pegem Akademi Yayıncılık.
- Senemoglu, N., Gomleksiz, M. Ve Ustundag, T. (2001). *İlköğretimde etkili öğretim ve öğrenme öğretmenin el kitabı öğrenmenin olusumu modul 1*. MEB Yayinlari.
- Serin, M. K. (2014). *İs birliğine dayali ortamlarda gerçekleştirilen ustblissel sorgulama temelli öğretimin ilkokul 4. sinif öğrencilerinin problem cozme becerilerine etkisi* (Yayımlanmamış doktora tezi). Necmettin Erbakan Üniversitesi.
- Siegel, C. (2005). Implementing a research-based model of cooperative learning. *The Journal of Educational Research*, 98(6).
- Slavin, R. E. (1987). Development and motivational perspectives on cooperative learning: A reconciliation. *Child Development*, 58(5), 1161-1167.
- Slavin, R.E. & Karweit, N.L. (1981). Cognitive and affective outcomes of an intensive student team learning experience. *The Journal of Experimental Educational*, 50(1), 29-35.
- Slavin, R. E. (1991). Student team learning: a practical guide to cooperative learning. National Education Association
- Soysal, T. (2019). *Türkçe derslerinde is birlikli öğrenme etkinliklerinin 21. yuzyil öğrenme ve yenilikçilik becerilerini gelistirmeye etkisi* (Yayımlanmamış doktora tezi). Bolu Abant İzzet Baysal Üniversitesi.
- Sonmez, V. (2008). *Program gelistirmede öğretmen el kitabı* (16. baski.). Ani Yayıncılık.
- Stringer, E. T. (2007). *Action research*. (3th ed.). Sage Publications.
- Senturk, U. (2020). *Fen egitiminde 'jigsaw' tekniğinin öğrenci basarisi ve derse karsi tutuma etkisi* (Yayımlanmamış yüksek lisans tezi). Gazi Üniversitesi.
- Simsek, U. (2007). *Cozeltiler ve kimyasal denge konularında uygulanan jigsaw ve birlikte öğrenme tekniklerinin öğrencilerin maddenin tanecikli yapıda öğrenmeleri ve akademik basarilari üzerine etkisi* (Yayımlanmamış doktora tezi). Atatürk Üniversitesi.
- Tarlakazan, E. (2010). *İlköğretim gorsel sanatlar dersi 6. sinif kazanimlarinin is birlikli öğrenme yöntemi etkinlikleri ile gerçekleştirilmesinin öğrenci erisisine etkisi* (Yayımlanmamış doktora tezi). Gazi Üniversitesi.
- Tauer, J. M. ve Harackiewicz, J. M. (2004). The effects of cooperation and competition on intrinsic motivation and performance. *Journal of Personality and Social Psychology*, 86(6), 849-861. <https://doi.org/10.1037/0022-3514.86.6.849>
- Taylor, M. (2002). *Action research in work place education: A handbook for literacy*. <https://files.eric.ed.gov/fulltext/ED462557.pdf>
- Toffler, A. (1992). *Yeni guçler yeni soklar*. Altın Kitaplar.
- Uysal, G. (2010). *İlköğretim Sosyal bilgiler dersinde isbirlikli öğrenmenin erisiye, problem cozme becerilerine, öğrenme stillerine etkisi ve öğrenci gorusleri* (Yayımlanmamış doktora tezi). Dokuz Eylul Üniversitesi.
- Uysal, M. E. (2009). *İlköğretim Türkçe dersinde isbirlikli öğrenmenin erisi, elestirel dusunce ve yaratıcılık becerilerine etkisi* (Yayımlanmamış doktora tezi). Dokuz Eylul Üniversitesi.
- Utkur, N. (2016). Öğretmenlerin kullandıkları yöntem ve teknik farklılıkları: Hayat bilgisi dersi örneği. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 16 (USBES Özel Sayı II), 1631-1651.
- Wessner, M. ve Pfister, H.-R. (2007). Points of cooperation: Integrating cooperative learning in to eeb-based courses. In H. U. Hoppe, H. Ogataand A. Soller (Eds.). *The Role of Technology in CSCL* (pp. 21-46). Springer Science Business Media.
- Yavuz, M. (2020). *Basimiza icat cikaran cocuklar ve gençler*. Pegem Akademi Yayıncılık.



- Yesilyurt, E. (2009). İis birliğine dayalı öğrenmenin öğrenci davranışları üzerindeki etkisine ilişkin öğrenci görüşleri. *Fırat Üniversitesi Sosyal Bilgiler Dergisi*, 19 (2), 161-178.
- Yılar, M.B. (2015). *Sosyal bilgiler dersinde iş birlikli öğrenme yöntemlerinin öğrencilerin akademik başarılarına, demokratik tutumlarına ve sosyal becerilerine etkileri* (Yayımlanmamış doktora tezi). Atatürk Üniversitesi.
- Yıldırım, A. ve Simsek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri* (6.baskı). Seckin Yayıncılık.
- Yıldırım, K. (2010). *İis birlikli öğrenme yönteminin okumaya ilişkin bazı değişkenler üzerindeki etkisi ve yöntemle ilişkin öğrenci-veli görüşleri* (Yayımlanmamış doktora tezi). Gazi Üniversitesi.
- Yıldız, A. (2019). *Stresli bir dünyada mutlu çocuk yetistirmek*. Alfa Yayıncılık.

**Authors**

Sinan ARI  
Basic education

Sabahattin CİFTCİ  
Basic education

**Contact**

Dr. Sinan ARI,  
Ministry of National Education, Şehit Suat Akinci Public Education  
Center, Sarıkaya / YOZGAT  
E-mail: [dr.sinanari@gmail.com](mailto:dr.sinanari@gmail.com)  
Prof. Dr. Sabahattin CİFTCİ  
Necmettin Erbakan University, Ahmet Keleşoğlu Faculty of Education,  
42090 Meram / KONYA  
E-mail: [sciftci@erbakan.edu.tr](mailto:sciftci@erbakan.edu.tr)