

## COLLABORATIVE LEARNING

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### ABSTRACT

Collaborative learning is the process of learning by students from different abilities, gender, race and social skill levels, working in small groups towards a common goal and helping each other learn. Collaborative learning is a model in which students are divided into small, heterogeneous groups during course practices and support each other's learning and the joint action of the group is emphasized. In this model, students are responsible for both their own learning and the learning of their groupmates. For this reason, it can be said that learning by helping each other is at the forefront in collaborative learning. The most important condition for an effectively created for collaborative lesson is that students embrace the idea that they will win or lose together. During collaborative teaching, group members have two important duties: learning the given subject and being responsible for and helping other group members learn the subject.

The academic benefits of this learning model include: "It makes students think at a higher level and provides them with the opportunity to express their ideas comfortably in a discussion environment.", "It contributes to the characteristics of critical thinking and being open to criticism.", "It contributes to the characteristics of participating in and creating activities.", "Inter-individual. It strengthens communication.", "It allows students to take responsibility and improve their participation in activities during practices.", "It enables positive emotions such as cooperation, discovery and creation to emerge, rather than feelings of race and competition between students." It was understood as a result of the literature review in which it was included.

**Keywords:** Collaboration, learning, collaborative learning

## 1. INTRODUCTION

From the moment of birth, humans need to feel safe and adapt to the environment they live in. The differences brought by a new method and various difficulties arise for all people, from newborns to elderly people. For her child, it is a foreign situation for her to be reflected from the mother's womb and to be in the outside world and to encounter people. Likewise, as the child grows up, new social environments, new conditions and rules are situations that he/she must get used to and adapt to. Such a potential human being tries to maintain the new situation and adapt to this new situation. Harmony is the ability of an individual to meet his or her needs by establishing a balanced relationship with his or her own self and the environment in which he or she lives and to continue doing so. In this context, people's ability to socialize is directly proportional to ensuring this necessary harmony (Yeşilyaprak, 1989).

Writing is one of the communication tools that people use to convey their feelings and work to continue. Writing is the process of designing emotions and thoughts in the mind and expanding them into writing through various signs and symbols. Writing is putting forward an explanation and a meaningful structure within itself by bringing together any extra narrative units (Coşkun, 2014). Writing is the process of using symbols to communicate orderly. It is a system that represents the visual or tactile form of language. Writing is one of the four language skills that need to be practiced hard (Al-Jumaily, 2015). Writing involves a process of thinking, drafting and revising specific components (Brown, 2001).

Writing is expressing the emotions, thoughts and information in the mind in writing. To do this, they need to understand well what they hear and read and make calculations in their minds. The writing process includes three stages: reviewing preliminary information, editing and transferring. Writing begins with mental development, feelings, thoughts and review of information. The purpose, method, subject and boundaries of the article are determined and the information to be written is selected. Selected information is organized by running various industrial processes. The emotions, thoughts and information that are decided to be conveyed to ensure regulation are conveyed through letters, therefore words and sentences (MEB, 2009).

Today; writing, which is an effective communication tool in both print and online environments, includes various types. According to their purpose; It can be grouped under the headings of informative, entertaining, persuasive, descriptive and questioning (Güneş, 2016). Among these genres, persuasive writing has gained a place in every aspect of life with a wide range of uses. The purpose of persuasive writing is to persuade the reader of a topic or point of view. Persuasive writing can express, argue, analyze and evaluate a topic. It can also entertain and inform (Australian Curriculum (NAPLAN), 2013). Persuasive writing; It ranges from education to economy, politics and private life. Human communication often contains persuasive elements. In daily life, persuasion naturally accompanies behavior. For example, families attempt to persuade their children to raise them according to the environment in their social life. Teachers, on the other hand, want to persuade their students to gain knowledge and behavior in line with the goals of education (Jamieson, 1996).

Writing, which is an effective online communication tool that is kept in print these days, includes various types. According to their purpose; It can be grouped under the headings of informative, entertaining, persuasive, descriptive and questioning (Güneş, 2016). Among these genres, persuasive writing has gained a place in every period of life with a wide range of usage. The purpose of persuasion editing writing is to persuade the reader of a topic or point of view. Can express, argue, analyze and evaluate a persuasive essay topic. It can also entertain and inform (Australian Curriculum (NAPLAN), 2013). Persuasive writing; It ranges from education to economy, politics and private life. It contains elements that help unravel human knots. Daily survival naturally accompanies behavior. For example, he attempts to persuade his children to grow up according to the values in their families' social lives. On the other hand, teachers require

compromise in order to achieve knowledge and behaviors regarding the goal of education (Jamieson, 1996).

In today's world, many things are linked to persuasion. Marketers, advertisers, politicians, doctors make many attempts to persuade people. They work hard and spend money to attract people's attention and persuade them to buy products and services, try them, vote for their candidates, consent to treatment, or contribute to their cause (Sezen, 2010). Research shows that although people are exposed to thousands of intertwined messages, advertisements and images when they spend time in front of the screen, they do not have sufficient knowledge and skills in physical and mental practice to question, evaluate and develop a critical perspective on the contents of these texts structured by the media (Kinchoeloe and Steinberg, 1997).

The dizzying development of technology has transformed people's social lives into blogs, Facebook, Instagram, WhatsApp, etc. has translated into social media environments. However, it has become increasingly difficult to know what is right and what is wrong in online environments. As a matter of fact, it is easier to manipulate reality in virtual environments than face-to-face communication (Hogan, 2018). Unlike the basic language skills of writing, speaking and listening, it is not a type of skill acquired through natural processes; It needs to be learned and cannot be implemented without learning (Akyol, 2006). Acquiring writing skills and achieving the desired goals, which requires a long process, is only possible with various and encouraging writing practices (MEB, 2006). For this reason, when persuasive writing studies are carried out in accordance with various methods and techniques, persuasive writings can reach the desired level. The process-based writing model, which is now adopted in the curriculum of many countries, can be very useful in the persuasive writing process. At the same time, active learning techniques can be easily used in the persuasive writing process and provide more permanent learning. Cooperative learning, one of the active learning techniques, is a peer-centered teaching style that encourages academic success and creates positive social relationships (Maden, 2011).

Collaborative learning is the process of learning by students from different abilities, gender, race and social skill levels, working in small groups towards a common goal and helping each other learn (Baş, 2012). With the development of Web 2.0 technologies, it has become possible to create collaborative social learning communities (Akçapınar and Aşkar, 2014). Thanks to these communities, students can write together and produce products collaboratively, even if they are not in the same environment. Web 2.0 tools contribute to the formation of a constructivist approach in education. By means of these tools, it is possible to make sense of information by participating together and in cooperation, where individual differences are at the forefront. This highlights the use of these tools in terms of supporting constructivist learning (Horzum, 2010).

Social software is the type of software that will enable learners in e-learning environments to interact with other individuals and content in the environment. They are recommended to be used in online learning environments as they contribute to interaction between learners and therefore effective learning. In e-learning environments where there are tools that enable collaboration and communication with groups, learners realize that the environments are followed by other individuals and can feel the presence of other individuals. The individual's confidence in the environment increases when he feels that he is not alone in the environment. By adding discussion forums to e-learning environments, learners can be helped to develop their sense of responsibility and sharing and the effect of time and space restrictions can be reduced by participating in forums (Kıcı and Dilmen, 2014).

In today's educational activities, where expectations from education have changed and the individual learner is centered, the opportunities offered by technology have begun to be used at the highest level possible (Bolat, 2016). For this reason, online learning or in other words, learning in online environments, has affected the education policies of countries. As a matter of fact, when the curriculum and textbooks in developed countries are examined, it will be seen that online learning

has gained a place. It is understood that in these countries, students are making great use of online environments to acquire basic language skills. For similar purposes in Turkey, the Ministry of National Education has implemented the Movement to Increase Opportunities and Improve Technology (FATİH) project. In order to effectively use and manage the electronic resources and infrastructure established with the FATİH project, the Education Information Network, which provides reliable and accurate e-content for grade levels and courses separately, was put into service in 2012 as one of the main components of the project (Maden and Önal, 2018).

### 1.1. Collaborative Learning

Collaboration is a joint action between individuals or groups that achieves their common goals. There are two main concepts in collaboration; joint action and joint decision-making. Joint action; when it refers to the coordination of people's behaviors in time and space to achieve a common goal such as dancing, singing and imitating simultaneously, joint decision-making refers to more than one person coming together with similar ideas in similar situations. As a result of these two situations, the action taken and the decision taken affect not only the person himself but also his group (Li et al., 2020). The cooperative learning model was developed in the 1970s out of concern that students had little opportunity to use their interpersonal skills in traditional, competitive and individual learning environments in schools. This model allows students to share their experiences in the course as well as their peers' experiences (Guzman and Paya, 2020).

During the model implementation phase, educational environments are arranged in a way that allows students to work together. Collaborative learning combines social and cognitive learning, aiming for students to achieve success together as a result of learning together (Casey and Goodyear, 2015). Unlike styles based on direct instruction, the model has a wide range of learning options that place the student at the center of the teaching-learning process. Within this range of options, the pedagogical basis of collaborative learning is the student. The cooperative learning model emerged in response to the low interaction between students initially observed in educational settings. One of the main purposes of this learning model is to facilitate the relationship between individuals in the learning-teaching process. From this perspective, in collaborative learning practices, positive interaction and mutual commitment will occur among students and the efficiency obtained from the course will increase (Rivera-Perez et al., 2020).

Cooperative learning fundamentally emphasizes the formation of small groups of students with different abilities and prior knowledge who pursue the highest standard of individual and group performance through communication, teamwork and mutual trust. Collaborative learning is an important competency in society. When we look at collaborative learning experiences; situations such as the basic principles of student-centered learning, understanding teaching materials, active learning of students, placing an increased sense of responsibility in students, creating an adequate learning environment and motivation are frequently observed (Luo et al., 2020).

Collaborative learning is based on theories of cognitive development, behavioral learning and social interconnectedness. Cognitive development is a result of cooperative learning. The fact that students are rewarded for their participation in activities as a result of collaborative learning practices shows that behavioral learning theory is used. Collaborative learning is a teaching theory that affects the development of more effort, positive interpersonal relationships and mental health among students (Attle and Baker, 2007). Collaborative learning is a type of learning that contributes to the development of different skills such as learning motivation, motor skills, learning outcomes, learning attitude, critical thinking ability, socialization and problem-solving skills (Luo et al., 2020). Collaborative learning is considered a pedagogical practice in educational settings that encourages students to socialize and learn at various levels of education and in different course environments (Legrain et al., 2021).

Collaborative learning is accepted as a teaching model that can help achieve four learning outcomes. These are; psychomotor, emotional, cognitive and social areas. The model fosters social relationships among peers and helps meet related needs. Collaborative learning is a teaching strategy based on the overall performance of the team/group in which the individual participates. Group heterogeneity, interdependence, mutual interaction, personal responsibility, group and self-evaluation are the basic elements of collaborative learning (Liu and Lipowski, 2021). Collaborative learning defines the process in which students think and get ideas together in small teams (groups) in order to achieve the same educational goal and are rewarded together if the product they produce is successful. Collaborative learning can be likened to team games such as volleyball or handball. The success of the team depends on all players performing well and helping each other. Playing cooperatively is important. If any player in the team does not perform well or plays individually or selfishly, it will negatively affect the team performance (Ekinçi, 2005).

Dyson (2002) defined collaborative learning as a teaching model in which students work together in small, structured and heterogeneous teams and all team members help each other learn while achieving group goals. The cooperative learning model reflects the idea that students who want to achieve success in groups support, motivate, help each other and encourage each other to do better in this process (Erdoğan and Özdemir, 2019). In the collaborative learning process, a positive relationship between group members is very important for the group to achieve its common goal. In this process, it is considered important for the group to reach the common goal rather than achieving individual goals. In summary, when everyone in the group fulfills what they need to do and reaches their goal, everyone's goal will be completed (Yılmaz, 2001). In the collaborative learning process, students engage in different learning experiences. In this process, students not only structure their knowledge, but also have the chance to reinforce what they know, transfer it to someone else and thus learn once again while teaching (Ekinçi, 2005).

Gillies (2006) also stated that collaborative learning is a model that takes students to different learning experiences in the course, provides more active participation and makes it easier for students to learn complex course content. Collaborative learning model; It contributes to individual differences in classes, student academic success, the principle of equality in education and social and personal development (Antil et al., 1998). Yıldız (1999) also describes collaborative learning; It is defined as the process in which students with different abilities, social skills, cognitive achievement, character and gender characteristics in the classroom environment participate in the learning process by contributing to each other's learning by working together in groups ranging from 4 to 6 in order to achieve the same goal. According to Smith (1996), BC; It is a process in which all members of the group have responsibilities to achieve a common goal, exchange ideas and help each other learn while realizing these responsibilities. This process is continued by group members while maintaining positive solidarity and group spirit. Beydoğan (2001) also mentioned collaborative learning practices as a teaching activity in which students are given the opportunity to objectively evaluate themselves and their groupmates in the process and friendship and friendship relations develop.

## 1.2. Collaborative Learning Techniques

Different techniques are used in the cooperative learning method. Cooperative learning principles are used to bring groups to success in accordance with their goals (Şahin, 2011). Some of these techniques are:

### Learning Together

It was developed by Johnson and Johnson in the 1960s. "In the cooperative learning technique, students receive grades based on the cluster average calculated based on the achievement tests they take individually. Students are rewarded according to their success within the group and

their individual achievements” (Gömleksiz, 1997a). In this technique, heterogeneous groups consisting of 4-6 people are formed. These groups are given any topic. Groups prepare their work and present it in class. They are evaluated individually and as a group. Everyone in the group gets the same grade. Students work in groups and help each other learn.

### **Student Teams Achievement Sections**

In this technique, groups do not compete with each other. The most important feature of this technique is the tool. For this reason, interaction within the group should be high and students are asked to do their best for each other and the success of the group (Açıkgöz, 2011; Ekinci, 2005). At the same time, the individual success of the student is important in this technique. Because the scores students receive are compared with their previous scores. Students can contribute to the group score if they improve on their previous performance.

### **Team-Play Tournament**

It was developed by De Vries and Slavin (1978). In this technique, students are distributed in balanced and heterogeneous groups of 4-5 people. The goal of the groups is to be successful in the tournament. “The teacher explains the subjects that need to be learned during the week to the students through whole class teaching” (Gelici and Bilgin, 2012). Students in the group bring together resources and materials related to the topic. In the tournament, a deck of cards is prepared with the numbers of the questions written on them. Contestants draw cards. Questions are asked according to the number on the card. If the student can answer the question, his/her team gets plus points, if not, minus points. If the other contestants give the correct answer, their team gets plus points. If they answer incorrectly, they do not receive minus points (Maden, 2011). In this technique, tournaments are organized every week in which one person from the group participates. The score received by each student is added to the total team score and the group is given a reward according to the score. The one with the highest score among the groups becomes the winner of the tournament.

### **Team Supported Individualization**

It was introduced by Slavin, Lavey and Madden (1986). “This technique was developed for use in teaching mathematics” (cited in Senemoğlu, 1998). The groups in the technique are heterogeneous, consisting of 4-6 people and the application period is 6 weeks. Each student in the group is paired with a friend of their choice. Before using the technique, a pre-test is given to the students and it is determined from which point the subject will start. Tarım and Akdeniz (2003) describe the application process of the Team Supported Individualization technique as follows:

**Teams:** Heterogeneous groups of four people are formed in terms of gender, ethnic group and academic achievement.

**Teacher Lecture:** The teacher first covers the topic or topics that will be taught that week with two hours of whole-class teaching. At this stage, students are given the conceptual foundations of the subject and solve a few examples.

**Worksheets:** Worksheets consist of two or three boxes with 4 questions each. Each tile contains questions about all the topics covered that week. However, each box consists of questions parallel to the others. Worksheets are distributed, one to each student. Students first work on the worksheets individually. At the end of each box, students exchange papers with their friends and check each other. Then, each student is given a worksheet with an answer key. Students are expected to solve at least one box without any errors.

**Monitoring Tests:** in the next stage, monitoring tests are deployed. First of all, the monitoring test form A, which covers all the intended behaviors for that week, is distributed to the students. After this test is solved individually, group friends check each other's tests. Students who pass at least 80% are entitled to take the subject exam after receiving the approval of their peers,

without taking the Follow-up test form B. Students who cannot show the desired success in form A take the Follow-up test form B and the same process is carried out in this test.

**Subject Exam:** in the last lesson of the week, a subject exam is held covering the objectives and behaviors intended for that week. Students take the exam individually and their cluster success is calculated based on the scores they receive from this exam.

**Certificates of Achievement:** Students are evaluated as a group, not individually. Cluster success scores are calculated based on individual progress scores. Clusters that exceed predetermined criteria are given a cluster success certificate (Tarım and Akdeniz, 2003).

Team-supported individualization technique not only supports students' problem-solving skills in a collaborative manner, but also helps students in both heterogeneous classes and programmed teaching, computerized teaching, mastery learning, etc. It tries to eliminate the disadvantages of teaching strategies regarding cost and implementation (Açıkgöz, 2011).

### **Combined Collaborative Reading and Composition**

It was developed by Madden, Slavin and Stevens (1988). This program, which is used to teach reading and writing in the upper primary grades, contributes to facilitating learning in language teaching. It was designed to teach reading, writing and language skills in the upper grades of primary education (cited in Açıkgöz, 1992). Before applying the technique, reading groups are formed from the students. Teams of two people are formed from the reading groups created. These teams try to teach each other reading and writing skills in a collaborative manner.

During this process, teams read aloud, recognize grammatical components and improve vocabulary, decoding and spelling skills. Again, in this process, teams go through a structured writing process with their teammates to plan, draft, review, edit and publish the compositions they will write (Madden, Slavin and Stevens, 1988).

The teacher does not act independently during the collaborative work process. He works with groups and guides them through the collaborative reading and writing process. At the end of the process, teams receive awards based on the average of their efforts in reading and writing.

### **Group Research**

The foundations of the group research technique were laid by John Dewey and developed by Sharon in the 1970s. Slavin (1996) states that group research techniques are small groups in which students are more active, self-prepared learning activities are at the forefront and projects are produced in line with individual and group research. In the group research teaching technique, individual study and evaluation have an important place. Because the aim is to activate the prior knowledge of the students in the group and to prepare the ground for learning by ensuring the active participation of each student (Şahin et al., 2011). The application of this technique consists of 6 stages (Açıkgöz, 2011; Şahin, 2011; Kaya, 2013; Tunç, 2016):

1. Students are divided into heterogeneous groups of 2-6 people.
2. Students in the group share subtopics and design how they will research their topic. Students who divide their labor determine which topics they will research and from what kind of sources.
3. Groups implement the plan they have created and conduct the necessary research. The teacher provides guidance and organizes resources that may be useful to the students. Each student collects, analyzes and evaluates information related to his/her own task. Then, after all group members share the information they have identified and organized with each other, they come together and try to solve the research problem.
4. In this stage of the study, expert groups are formed from the students determined from the groups. Individuals in these groups report the results obtained after collecting information and

clarifying the problem.

5. Reports created by groups are presented in the classroom environment through various tools and equipment.

6. In the last part, evaluation is made. Students are involved in the evaluation process. Exams are notified to students in advance.

In the group research method, students need to put in more effort and effort. In this respect, the student must be well motivated before starting to study. In addition, the group research method is beneficial not only cognitively but also affectively and socially.

### **Let's Ask Together, Let's Learn Together**

This technique was introduced by Açıkgöz (1992). Students are divided into heterogeneous groups of 3-4 people. Students divided into groups read about the theme or topic given by the teacher. Students prepare questions about the topic they are reading. Prepared questions are written on cards. Then, the questions prepared in the groups are evaluated. Teachers also provide guidance and score the questions. Questions determined by the groups are asked to other groups through the group spokesperson. Groups solve the questions collaboratively and give them to the group spokesperson. Spokespersons of the group present the group's answers to the class. During the presentation, the achievements of the group and the speaker are evaluated by the teacher or other students. For this purpose, the teacher distributes evaluation forms to the students. After the groups finish their presentation, the teacher summarizes the topic and starts a discussion. Finally, students take the exam individually. Groups do not compete with each other and are not ranked in terms of success, they are evaluated according to predetermined criteria (Açıkgöz, 2011).

### **Jigsaw (I, II, III, IV, Reverse, Thread) Techniques**

Jigsaw method Aronson et al. (1978). All groups learn the same topic or unit. The subjects that the groups will study are divided into sections according to the characteristics of the subject. Members in groups choose a particular topic to learn. Then, students studying the same subject in other groups come together and form expertise groups. In expert groups, information on the subject is given, subjects are examined and discussed in all aspects. After students in the expert groups have learned all aspects of the subject, they return to their groups and try to teach their groupmates what they have learned. In groups, students are tested after they have learned all parts of the subject together or with each other. At this point, it becomes clear how productive the work is. Tests are performed individually and results are scored individually. The application stages of the Jigsaw technique are as follows (Açıkgöz, 1992; Şahin, 2011; Gömleksiz, 1997b):

Formation of Main Groups: Groups consist of 2-4 or 6 people heterogeneously.

Dividing the Material: The subject is divided into as many parts as there are students in the group. Each part is distributed to students.

Expert Groups: It is an important stage for the Jigsaw technique. Students leave their groups and form new groups with other students responsible for the same subject. This group is called the expert group. These groups try to reveal the subject in all its aspects and plan how they can teach it to their friends in the main group. They also create a report about this.

Return of Expert Groups to Main Groups: Students in the expert group return to their own groups and teach their subjects to their friends in line with the report.

There are six types of Jigsaw techniques that can be used during the teaching phase. These techniques are basically similar to each other. "Jigsaw I, Jigsaw II, Jigsaw III, Jigsaw IV techniques all have different names due to the differences in the application of the processes" (Şimşek, 2007). The difference between Jigsaw I and Jigsaw II is that Jigsaw II allows team competition. The difference between Jigsaw III and Jigsaw I and II is that the process is evaluated with forms. The



difference between Jigsaw IV and Jigsaw I-II-III is that a mid-term exam is held to check the accuracy of the learning in the expert and main groups and in the final phase, the re-teaching of the missing parts of the unit is included in the practice (Maden, 2011).

In the Reverse Jigsaw technique, which is one of the jigsaw techniques, group members investigate and question the subject in more depth and detail (Hedeen, 2003). Although it is basically similar to other Jigsaw techniques, the number of participants in the Reverse Jigsaw technique and, accordingly, the number of comments and ideas are quite high. In addition, the Reverse Jigsaw technique differs from other Jigsaw techniques in that expert groups return to their original groups after discussing the subject, the class is regrouped and the presentation is mandatory at the end of the process.

### **Academic Paradox**

Academic paradox was developed by Johnson and Johnson in the 1970s. "It is a technique used to reveal inconsistencies between students' thoughts, study results and ideas, to notice contradictions regarding the subject and to get high efficiency in learning by using contradictions" (Sevim and Varışoğlu, 2015).

Academic contradiction strategy; powerful, dynamic, exciting, engaging; However, it is shown as one of the least used teaching strategies. Academic Contradiction is a teaching practice that can be effective in teaching critical thinking and reaching rational judgments (Şahin, 2011). In addition, academic conflict enables students to think in multiple ways, to defend an idea by producing justifications, to take sides with an idea and to compromise on an idea. In this respect, it can be used in persuasive writing or speaking studies.

Before the application of the technique, the class is divided into heterogeneous groups of 4 people. Topics that contain contradictions are presented to the groups by the teacher. Contradictions should be open to discussion and contain defensible aspects. The groups prepare their suggestions in the form of a report. Likewise, groups divide into subgroups that defend views that are opposite to the view they defend and design how they will defend the view. The parties defend the ideas they put forward by explaining their views and reasons. "Then the groups express the opposing view within themselves. Instead of defending their own views, students come to an agreement by summarizing and synthesizing the best evidence and prepare a group report. Finally, group members individually prepare for the exam on the subject (Açıköz, 2011).

### **Mutual Interrogation Technique**

The Response Query technique was developed by Senemoğlu (1998). Cross-examination does not require special materials or special testing procedures. After the teacher presents the topic, students are divided into groups of two or three. They ask each other questions about the subject and give answers (Baş, 2012). In this respect, the mutual questioning technique is easy to prepare and apply. The application stages of this technique can be classified as follows:

1. Teacher's Information: The teacher gives information about the nature of the questions.
2. Forming Student Groups: This technique can be applied individually or in groups. Students are divided into groups of two, three or four.
3. Preparation and Answering of Questions: Questions are prepared by students or groups, questions are asked and answered mutually.
4. Evaluation: The right and wrong sides of the answers to the questions are determined.

### **Cooperation-Cooperation**

The Collaboration-Collaboration technique was developed by Sharan et al. (1985). This technique aims to reveal students' curiosity, intelligence and abilities. Sharan et al. (1985) describe the application process of this technique as follows:

**Student-centered class discussion:** Discussions are organized in the classroom to stimulate students' curiosity about the subject to be studied under the guidance of the teacher.

**Selection of student teams and formation of teams:** Students are divided into groups in line with the targeted achievements. When creating groups, emphasis should be placed on ensuring that the groups are heterogeneous and that students who will work collaboratively are distributed. Additionally, it is important for students to work in an environment where they can express themselves easily.

**Selecting the team topic:** After the groups are formed, a class discussion is held on a topic that interests everyone in the class. Techniques such as brainstorming can be used in this process. Students can start group work by choosing from the topics created in this way.

**Selecting mini topics:** Within the group, topics are divided into subheadings according to the nature of the topic. Sub-topics are determined and distributed by paying attention to the number of members in the group. "Meanwhile, the teacher makes sure that the mini (sub)topics are included in accessible resources and are appropriate for the student's level" (Şahin, 2011).

**Preparation of mini-topics:** In this part, students identify and bring together information and resources about sub-topics.

**Presentation of mini-topics:** At this stage, group members present the presentation they have prepared as a result of their work on sub-topics to their group. The important thing here is that the presentation is related to the main topic and that listening and watching behaviors are shown appropriately while making the presentation.

**Preparing the teams for the presentation:** Students prepare the team's presentation in line with the mini presentations prepared by the subgroups. The team presentation should be above the mini-presentations created by the sub-groups, revealing all aspects of the topic covering them.

**Team presentation:** Teams present the presentations they have prepared in this section of the study. Students can use various visual and audio equipment and organize the class according to the presentation. During this time, it is important that the students listen actively and do not behave in a way that would harm the motivation of the students who will make the presentation.

**Evaluation:** In this section, the presentations made by the groups and the individual contributions of the students in the group are objectively evaluated by the students and the teacher.

## 2. RESULTS

The contemporary education approach adopted today supports and targets the versatile development of the individual in the context of both formal education and non-formal education. The versatile development of the individual includes three developmental areas: psychomotor, affective and cognitive. The development of these areas requires the use of different teaching methods in educational environments. Whatever model, strategy or method will be used, its characteristics must be well understood and adopted and reflected in the educational environment. At this point, the most important element is the characteristic or behavioral change that the instructor wants to occur in the individual after the application. Each course discipline has different characteristics and the instructor must implement the course by taking these characteristics into consideration. Therefore, instead of using the same teaching method in every lesson, using appropriate models and methods will make education more permanent and efficient. Cooperative teaching techniques are used in the learning-teaching environments of many courses in schools when appropriate and appropriate.

Cooperative learning is an education model that serves all three areas of development. In the model, the development area mainly served may vary depending on the type of technique

and activities preferred according to the content of the course. Regardless of which technique in the model the instructors who will apply the cooperative learning model in educational environments prefer, students will find themselves in different course adventures. The educator who decides to implement the model must make a plan and program before the lesson, according to the cooperative learning technique and lesson activities he/she chooses. This planning and program made before the lesson can contribute to the lesson progressing more smoothly, effectively and regularly. In this way, lessons go through a more effective and efficient process. It is thought that teaching lessons with such a model will contribute to students' participation in more planned and regular course activities throughout the lessons.

It is thought that the preliminary preparation and planning made by the teacher in order to successfully apply this model in the lesson will contribute to a better quality and more effective time spent in the lessons for both the teacher and the students. Processes such as group awareness, competition, cooperation, individual and group responsibility under the umbrella of cooperative learning are some of the indispensable achievements of physical education and sports lessons. This study is necessary and important to determine what effect such a model has on the academic learning time of students in physical education and sports classes, considering its contribution to teachers and researchers in order to provide a better quality physical education lesson time and to the literature where there are limited studies on this subject. has been seen.

Collaborative learning has been a teaching method that has attracted the attention of educators since its emergence until today. Although many factors cause this situation, the most distinctive feature of the model is that it provides both individual and social benefits to the individual during its application. When the researches are examined, it can be seen that applying the model in the educational process provides academic, social and psychological benefits to the individual. The academic benefits of this learning model include: "It makes students think at a higher level and provides them with the opportunity to express their ideas comfortably in a discussion environment.", "It contributes to the characteristics of critical thinking and being open to criticism.", "It contributes to the characteristics of participating in and creating activities.", "Inter-individual. It strengthens communication.", "It allows students to take responsibility and improve their participation in activities during practices.", "It enables positive emotions such as cooperation, discovery and creation to emerge, rather than feelings of race and competition between students." It was understood as a result of the literature review in which it was included.

Social Benefits: "It supports social development among students.", "It develops students' sense of fulfilling their responsibilities towards each other.", "It develops the sense of empathy.", "It improves taking individual responsibility in group work.", "It helps students with different abilities and levels within the group." It reinforces the ability to respect individuals." It was understood as a result of the literature review in which it was included. Among its Psychological Benefits, the literature includes "It improves the student's self-esteem", "It contributes to internal motivation, internal motivation and characteristics.", "It improves self-control.", "It contributes to positive personality development by enabling students to get help from their friends and help their friends." It was understood as a result of the examination (Yılar, 2015; Arisoy and Tarım, 2013).

The fact that cooperative learning can be applied at all ages and levels is increasing interest in this model. Nowadays, class sizes in schools are becoming increasingly crowded and the fact that this model can be applied to crowded classes makes it preferred in educational environments. If the model is well planned and organized, all students will be able to ask questions, think, express opinions, research, question, etc. can experience beneficial processes. This increases class participation and prevents students from being left out. Thus, lessons can proceed in a more orderly and disciplined manner. The method appeals to students at different learning levels in the classroom and increases participation.

Being able to transfer collaborative learning to educational environments requires good planning and preparation. The model is a complex model and, by its nature, includes many different techniques. In the model, regardless of the technique chosen to be applied in the course, it requires a certain expertise, time, equipment, number of student groups, etc. Many factors are important. For this reason, practicing instructors-teachers and the student group may occasionally encounter some limitations before, during and after the application. Some limitations of the collaborative learning model are listed below.

- There is a need for more equipment during events.
- It is difficult to implement in classroom environments with small numbers.
- More time is needed for the preparation, implementation and evaluation phases.
- During the practices, students who dominate the group can establish authority over other students.
- If the activities and group studies are not structured adequately during the application, the studies may appear messy and undisciplined.
- Members who are more passive or have less self-confidence than others may be unable to adequately put forward ideas and participate.
- Members of the group who do not want to learn and do not participate may prevent other group members from learning.
- Offensive language or tone may be used during practices (Yıldız, 1999; Yılar, 2015, Güneş, 2017).

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