



## THE EFFECT OF CHILD-TO-CHILD TEACHING APPROACH ON STUDENTS' LEVEL OF SOCIAL RESPONSIBILITY IN SOCIAL STUDIES

Önder ERYILMAZ

Assist. Prof. Dr., Faculty of Education, Amasya University, Turkey

ORCID: <https://orcid.org/0000-0002-4962-889X>

[onder.eryilmaz@amasya.edu.tr](mailto:onder.eryilmaz@amasya.edu.tr)

Handan DEVECİ

Prof. Dr., Faculty of Education, Anadolu University, Turkey

ORCID: <https://orcid.org/0000-0001-9765-2117>

[hanil@anadolu.edu.tr](mailto:hanil@anadolu.edu.tr)

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### Abstract

This study aims to investigate the effects of the child-to-child teaching approach on students' level of social responsibility in primary social studies courses. A mixed-method experimental intervention approach was adopted in this research. The study participants were 5th-grade students, students' parents, and a social studies teacher. The social responsibility scale, semi-structured interviews, unstructured observation, control list, video records, student products, anecdotes, and researcher's diary were used as data collection tools. The results revealed that the child-to-child teaching approach (CtC) applied in social studies courses statistically impacted students' social responsibility levels. Moreover, it was determined that the CtC contributed to the students' social responsibility development according to the students', parents', and social studies teacher's views. It was also determined that participants had positive views regarding the CtC, and they thought that the approach was useful and enjoyable.

**Keywords:** Social studies, social responsibility, child-to-child teaching approach.

### INTRODUCTION

In recent years, social responsibility has been evaluated in connection with social entrepreneurship, sustainability, community service, and character development & leadership programs and is gaining importance, especially in education, business, and public administration (Sosik, Koul, & Cameron, 2017).

The core concept of social responsibility as a reinterpretation of citizenship education and briefly can be explained as a personal investment in the well-being of others and the planet (Berman, 1990). Faulkner and McCurdy (2000) defined social responsibility as an individual's active participation in activities carried out with the purpose of social welfare. Similarly, Sosik, Koul, and Cameron (2017) stated that social responsibility is helping other creatures of your own will, with no thought of personal gain, for the common good and recognizing this as a duty.

Social responsibility is associated with psychological processes such as cognition, creativity, personality, morality, and fairness, as well as attitudes and behaviors related to the purposes of the social studies course, such as the sense of belonging, commitment, participation, and satisfaction (Secchi & Bui, 2018). In addition, socially responsible individuals are generally those who have characteristics of effective citizenship, have moral sensitivity, are academically successful, establish strong social networks, act in accordance with human nature, are self-confident, and act logically (Sosik, Koul, & Cameron, 2017). Accordingly, social responsibility is closely associated with the



essential components of the social studies course, such as human rights, social justice, and social engagement (Kelly & Salmon, 2008).

One of the most important courses taught in Turkey's primary schools related to raising citizens with a sense of social responsibility is the social studies course. According to the main philosophy and purpose of the social studies curriculum (SSC), it can be argued that educating students to help them become socially responsible citizens is important. Social studies teachers use various instructional approaches, strategies, methods, techniques, and activities to achieve these objectives of the social studies course. The Child-to-child teaching approach (CtC) can be regarded as one of the effective instructional approaches that social studies teachers can use to provide social responsibility for their students. Because the main focus of the CtC approach is to help children develop social responsibility skills (Serpell, 2011).

### **Child-to-child Teaching Approach**

CtC consists of understanding, learning, planning, implementation, evaluation, and expanding stages. With this approach, children try to transmit the knowledge and experiences they obtained during the social studies course to their friends, families, and other individuals (Deveci & Selanik Ay, 2014). At the understanding stage of CtC, students collect information about the subject that will be covered in the social studies course. The learning stage involves the learning and deep reinforcement of the subject by students under the teacher's guidance. At the planning stage, students plan the subject they learned in the social studies course to make it ready to transmit to the target audience. The implementation stage includes the realization of the activities they planned. The evaluation stage is carried out under the guidance of the teacher and includes evaluation of the practices carried out through various in-class activities. Finally, at the expanding stage again under the guidance of the teacher, students develop ideas for increasing the effectiveness of the activities.

CtC approach does not consider child, family, and society as separate elements. They rather accepted as interconnected and complementary elements. This method establishes a relationship between the needs of the society and the social studies lesson. It contributes to the sustainability of learning and provides students with knowledge, skills, and values related to social responsibility, thus contributing to their effective socialization (Pradhan, 2007).

A literature review on CtC revealed that all studies were carried out with pre-school or primary school students. A majority of these studies are related to the health education of students in less developed countries (Knight, Grantham McGregor, Ismail, & Ashley, 1991; Ahmad, 1997; Chalker, 1997; Freeman & Bunting, 2003; Mwebi, 2005; Alazab, Elsheikh, & Kamal, 2008; Leena & D'Sozua, 2014). Besides, there are some reports on nutrition and health education of students about the CtC in developing countries (Hanbury, 1997; Ataman, 2009; Özyürek et al., 2016). However, little research has been done in developed countries on implementing the CtC approach to health education (Kirby and Gibbs, 2006). Additionally, there are some studies on the assessment of CtC implemented within the scope of some projects (Gilkes, 1997; Kattel & Carniege, 1997; Demir et al., 2009; Bhutta & Sylva, 2015; Serpell, Mumba, & Chansa-Kabali, 2011). Surprisingly, there are no studies concerning the implementation of CtC within a course to our best knowledge. Moreover, there are no studies on associating CtC with the development of social responsibility in students.

This study presents a solution to fill the gap in the literature concerning the effect of the CtC applied in primary social studies courses on students' level of social responsibility. The primary purpose of this paper is to find answers to the following questions:

- Does the CtC approach implemented in primary social studies courses affect students' level of social responsibility?
- Regarding the effect of CtC implemented in primary social studies courses on the students' level of social responsibility; What are the views of
  - students?



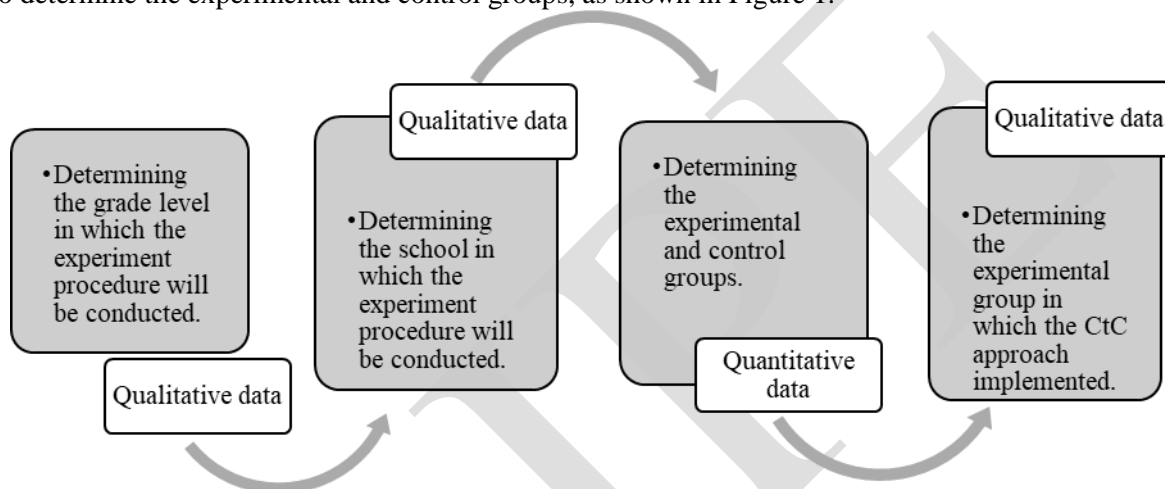
- parents?
- and the social studies teacher?

## METHOD

A mixed-method experimental intervention approach based on explanatory sequential mixed-method was employed in this research. Firstly, the quantitative data obtained through the experimental procedure was analyzed, and then, qualitative data were obtained and analyzed to explain or support the study's quantitative findings (Creswell & Plano Clark, 2018).

### Study Group

The study group consists of the students in the control and experimental groups, parents of the students in the experimental group, and a social studies teacher. Multilevel mixed-method sampling was used to determine the experimental and control groups, as shown in Figure 1.



**Figure 1.** The determination process of the experimental and control groups using multilevel mixed-method sampling.

Social studies teachers and experts were consulted to determine the grade level at which the experimental procedure will be conducted. The study was conducted in the 5<sup>th</sup>-grade social studies course based on the opinions obtained. While determining the school, to minimize possible language problems during communicating, the school with the least number of foreign students and at least with two 5<sup>th</sup>-grade classes were considered as criteria. While determining the school that meets these criteria, the R&D department of the Provincial Directorate of National Education was consulted, and the school was determined located at the city center. The Social Responsibility Scale (SRS) was implemented in the selected school, and two classes with the closest average scores were decided as experimental and control groups. Because control and experiment groups should be equal as possible to determine the effect of experimental manipulation. While determining the experimental and control groups, two classes having the same social studies teacher were determined. According to the opinion of the social studies teacher, one of these classes was determined as the experimental group and the other one as the control group. The demographic information of students in the experimental and control groups is given in Table 1.

In addition to the students in the experimental and control groups, parents of 9 students in the experimental group who voluntarily agreed to participate in the study were also included in the study group. Six of these parents were male, and three were female. Two of the male parents were teachers, the others were a shopkeeper, worker, civil servant, and retired police officer; female parents were a teacher, worker, and housewife. Moreover, a social studies teacher has also joined the study group. The social studies teacher was graduated from the social studies teacher education program of a state university in 2005. The teacher has been working as a social studies teacher in state schools since 2008.



**Table 1.** Demographic information of students in the experimental and control groups

Demographic information		Control Group		Experimental Group	
		f	%	f	%
<b>Gender</b>	Girl	13	56.5	11	50
	Boy	10	43.5	11	50
	Total	23	100	22	100
<b>Father's Job</b>	Retired	3	13	1	4.6
	Self-employment	5	21.7	5	22.7
	Shopkeeper	2	8.7	3	13.6
	Worker	2	8.7	7	31.8
	Civil Servant	9	39.2	6	27.3
	Farmer	2	8.7	0	0
	Total	23	100	22	100
	<b>Mother's Job</b>	Housewife	20	87	11
Worker		1	4.3	2	9.1
Civil Servant		2	8.7	7	31.8
Self-employment		0	0	2	9.1
Total		23	100	22	100
<b>Father's Education</b>	Illiterate	0	0	0	0
	Literate	1	4.3	1	4.6
	Primary school	5	21.8	2	9.1
	Secondary school	3	13	0	0
	High school	9	39.2	10	45.4
	College	3	13	8	36.3
	Post graduate	2	8.7	1	4.6
	Total	23	100	22	100
<b>Mother's Education</b>	Illiterate	1	4.3	1	4.6
	Literate	2	8.7	0	0
	Primary school	6	26.1	3	13.6
	Secondary school	6	26.1	6	27.3
	High school	8	34.8	5	22.7
	College	0	0	7	31.8
	Post graduate	0	0	0	0
Total	23	100	22	100	
<b>News Tracking Frequency of Student</b>	Daily	13	56.5	9	40.9
	Every few days	7	30.6	7	31.8
	Once a week	1	4.3	1	4.6
	Once every two weeks	1	4.3	2	9.1
	Once a month	0	0	0	0
	Never	1	4.3	3	13.6
	Total	23	100	22	100
<b>Participation Status in Social Responsibility Projects</b>	Yes	0	0	0	0
	No	23	100	22	100

### Data Collection Tools

SRS, semi-structured interview form, video recordings, unstructured observation, anecdote, student products, control list, and researcher's diary were used as data collection tools. Details regarding data collection tools used in this study are explained below.

### Social Responsibility Scale

A Likert-type SRS developed by the authors was used to determine students' level of social responsibility in the experimental and control groups. At first, an item pool was created and experts were consulted to evaluate the items in the scope of the content validity. For the content validity of the SRS, expert opinions were analyzed using Lawshe's technique (Yurdugül, 2005). Next, exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to determine the SRS construct validity. As a result of the EFA, a structure consisting of 4 subscales as environmental awareness, helpfulness, collaboration, and social awareness and 17 items was obtained. This structure



was verified in DFA. To determine the reliability of the SRS, Cronbach's Alpha internal consistency coefficient was calculated, and the test-retest method was used. The Cronbach's Alpha internal consistency coefficients for the subscales of SRS are presented in Table 2.

**Table 2.** The Cronbach's Alpha internal consistency coefficients for the subscales of SRS

Subscale	Internal Consistency Coefficient (Cronbach's Alpha)
Environmental Awareness	.718
Helpfulness	.685
Collaboration	.541
Social Awareness	.633
Total	.828

As seen in Table 2, the Cronbach's Alpha internal consistency coefficient of SRS is .828. A Cronbach's alpha coefficient range from .80 to 1.00 indicates strong reliability (Yaşar, 2014; Alpar, 2016; Karagöz, 2017; Yıldız & Uzunsakal, 2018). Accordingly, the SRS was determined as highly reliable. Moreover, while environmental awareness, helpfulness, and social awareness subscales were determined as reliable, the collaboration subscale was displayed lower but acceptable reliability. However, Akbulut (2011) stated that the Cronbach's Alpha internal consistency coefficient is highly dependent on the number of items and suggested examining correlations among the items for a structure with a small number of items. This could also be the reason to calculate Cronbach's Alpha internal consistency coefficient value of subscales as lower than 0.72. In this case, it is suggested to examine the correlation value between items and they should be at least .20. A correlation value range between .20 and .29 indicates an adequate and .30 and indicates a highly desirable internal consistency (Robinson, Shaver, & Wrightsman, 1991, as cited in Demirel & Sungur, 2018). The examination of the inter-item correlations for all subscales revealed that the correlation values for all items were above .20. Therefore, the total SRS and subscales were considered reliable according to the internal consistency coefficients.

Moreover, Pearson Correlation Coefficients were calculated for the scores obtained between the first and final testing of the test-retest method, and the obtained value of .764 indicated that SRS is highly reliable (Alpar, 2016). Finally, the scope and structural validity of the SRS consists of 4 subscales, and 17 items were confirmed and determined as highly reliable. The development study of the SRS was published as an article in a peer-reviewed international journal (Eryılmaz & Deveci, 2019).

### **Semi-structured interview forms**

Different semi-structured interview forms were prepared for students, parents, and the social studies teacher. In addition, two separate interview forms were prepared for the social studies teacher. Expert opinions were consulted for all interview forms, and the forms were modified accordingly. Moreover, within the scope of validity study of student interview forms, a pilot interview was conducted with two students in the experimental group, which were not included in the analysis. Following the pilot interview, semi-structured interview forms were reviewed again and finalized.

### **Video-recordings**

During the research period, video recordings of the applications implemented in the experimental group were made in line with the SRS. The video recordings comprised 717 minutes and 39 seconds of video data in the Culture and Heritage and People, Places, and Environments learning strands and were completed during 26-course hours. The video recordings were made between 26.10.2018 and 28.12.2018.

### **Unstructured observations**

Unstructured observations were carried out in the experimental group to obtain deeper information on the activities carried out, especially in the evaluation and expansion stages of the CtC. During the observations, the students' attitudes, their behaviors, developments during the process, relations with





their peers and teachers, and evaluations regarding activities implemented in the planning and implementation stages were monitored.

The researcher collected the data regarding unstructured observation by taking notes by seeking to avoid attracting the students' attention and avoiding affecting the experimental process for the purpose of the research.

### **Anecdote**

At the beginning of the experimental process, a notebook was given to each student to keep their anecdotal records. An anecdotal record sheet was added on the first page of the anecdote notebooks, including a guideline and template on keeping anecdotal records. Previously, the anecdotal record sheet was reviewed by an expert. The record sheet was then finalized. After completing the posttests applied to the experimental group, the social studies teacher collected the anecdote notebooks.

### **Student products**

During the experimental procedure, students who were in the experimental group recorded videos about their activities in the implementation stage of CtC. Moreover, students expressed their feelings and thoughts relating to the activities in the evaluation stage in writing. Besides, they also expressed their opinions on how to conduct the activities implemented during the evaluation phase more effectively in writing.

### **The control list**

The control list was prepared to observe if the activities directly or indirectly associated with CtC are implemented in the control group. The control list includes items regarding the stages of CtC. Next to each item, done and not done marks were included. Additionally, an Explanations section was also included for each item. Expert opinions were obtained on the control list. Then the control list was reviewed accordingly and finalized.

### **Researcher's diary**

The researcher had kept a researcher's diary regularly during the entire study period. The researcher had used this researcher's diary during the collection of quantitative and qualitative data, analysis of the data, and reporting of the findings.

### **Data Analysis**

Various quantitative and qualitative data analysis methods were employed to analyze the data obtained during the research process. The independent sample t-test was conducted between the pretest scores of the experimental and control groups on the SRS at the beginning of the experiment. On the other hand, One-way covariance analysis (ANCOVA) was applied to the posttest scores of the experimental and control groups. The posttest scores of the experimental and control groups were checked for test assumptions of ANCOVA, including normality, equality of variances, linear relationship between pretest (determined as the covariate variable) and posttest (determined as the dependent variable) scores of the experimental and control groups, and finally, the test for equality of the within-group slopes of the regression lines.

The effect size of the experimental procedure was also estimated using partial  $\eta^2$  values obtained in the one-way ANCOVA. Moreover, the power of the experimental procedure was also reported. The quantitative data obtained with the experimental procedure were analyzed using the SPSS software version 21.0.

On the other hand, the inductive data analysis approach was conducted to analyze qualitative data. Most of qualitative data were converted into text files. However, some qualitative data, such as student products, were copied by taking a photo and saved as photos to the computer. They were analyzed by NVIVO 12 Pro Qualitative Data Analysis Software. Moreover, the researcher's diary and unstructured observations were used to analyze the qualitative data.

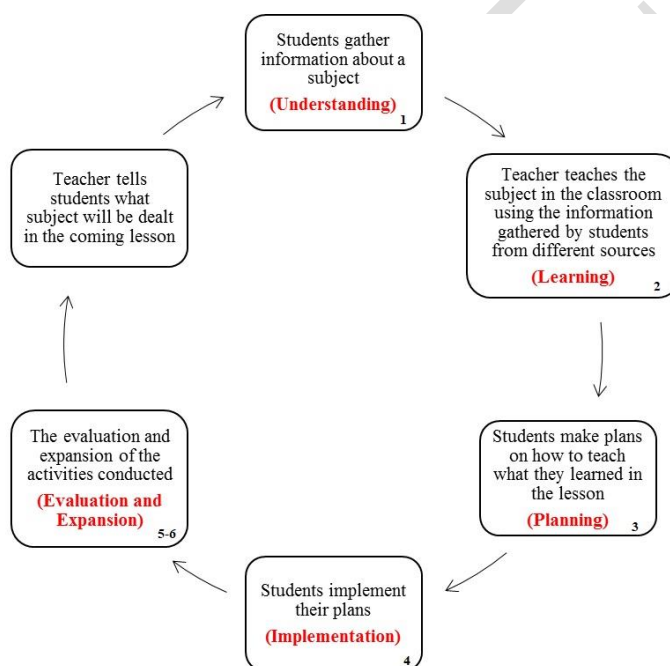


## Pilot Study

Individual and Society which is the first learning strand of the SSC was selected for the pilot study. The pilot study was conducted during 9-course hours and observed by the social studies teacher of the class. At the end of the pilot study, the lesson plans for the experimental procedure were modified according to the opinions and suggestions of the social studies teacher and the experiences obtained during the process.

## Experimental Procedure

During the experimental procedure, the researcher and the social studies teacher discussed how the lesson should be taught and how and when to use the materials. The same teacher taught social studies in both classes. While the social studies teacher implemented the lesson plans developed by the researcher for the experimental group, the control group continued their education using the regular plans. The process of CtC conducted in the experimental group is shown in Figure 2.



**Figure 2.** The learning process of CtC conducted in the experimental group.

As shown in Fig. 2, the learning process of CtC conducted in the social studies course consists of six stages. In the understanding stage of CtC, students collected information relating to the subject from various sources. The learning stage was performed in the class, and students shared information with their peers. Additionally, the social studies teacher gave more comprehensive information to raise awareness on the related subject by considering students' information-sharing in-class activity. In the planning stage, students made plans on how to transmit information they learned to their families, friends, or other people. In the implementation stage, students implemented the activities they planned. In the evaluation stage, students evaluated practices they implemented under the teacher's guidance through various activities. Finally, in the expanding stage, students develop ideas on how to transmit the subject more effectively to the target audience through various activities conducted by the social studies teacher.

## Trustworthiness of the Study

To increase the trustworthiness of the research, the authors used participant approval, expert assessments, and diversified data sources and data collection tools. Moreover, the researcher made long-term interactions in the research field, kept researcher diaries related to the research, and used direct quotations from the data obtained from the participants.



### The Role of the Researcher

The researcher had been in constant communication with the social studies teacher both in writing and orally during this process. The researcher discussed ideas with the social studies teacher about the activities and gave feedback before, during, and after the lessons.

Before all interviews, the researcher informed the participants about how to archive data, how to protect personal information, and how to report personal information by keeping data confidentiality, received verbal consent of the participants and performed audio recording during the interviews. In addition, the researcher tried to conduct the interviews in a friendly atmosphere to obtain frank and in-depth data from the participants. The researcher also ensured that interviews were conducted privately where people other than the participants were not present to prevent the participants from being affected.

Besides all, this research was conducted as a part of a Ph.D. thesis. Accordingly, the entire research was conducted by the first author of this paper, the author of the thesis. The second author of this paper is the thesis supervisor, who guided the first author during the entire research period and provided feedback.

### Research Ethics

Research and publication ethics permissions were obtained from a state university, then, other necessary permissions were obtained from the Ministry of National Education and Provincial Directorate of National Education. Before the experimental procedure, a PTA meeting was held to inform parents of the students in the experimental group. Written consents were obtained from all participants (students in the experimental and control groups, parents, and the social studies teacher) for the research through the voluntary participation forms. During the analysis and reporting stage of qualitative data, code names were used in accordance with the principle of maintaining confidentiality.

## FINDINGS

### T-test Results of the Pretest Scores of the Experimental and Control Groups

Assumptions including normal distribution and homogeneity of the data were examined to decide whether the data set is suitable for a parametric test. The descriptive statistics and the results of the normality tests and Levene's test for equality of variances were applied to the pretest scores of the experimental and control groups are shown in Table 3.

**Table 3.** The descriptive statistics and the results of the normality tests and Levene's test applied to the pretest scores of the experimental and control groups

Groups	Descriptive Statistics			Shapiro-Wilk		Skewness	Kurtosis	Levene's test			
	N	Mean	Std.Dev.	Df	p			Levene Statistics	sd1	sd2	p
Experimental	22	55.13	1.553	22	.247	-.326	-1.026	2.236	1	43	.142
Control	23	57.60	1.182	23	.644	-.252	-.407				

As shown in Table 3, while skewness and kurtosis values of the pretest scores of the experimental group were found as  $-.326$  and  $-1.026$ , respectively, the values of the control group were calculated as  $-.252$  and  $-.407$ , respectively. These results indicated that the data did not show excessive deviation from normal distributions. Moreover, the Shapiro-Wilk test was also used to examine whether the scores were normally distributed. As displayed in Table 3, the pretest scores of the experimental and control groups were determined as not significant at the  $.05$  level, and therefore, did not show excessive deviation from normal distributions. Furthermore, Levene's test for equality of variances demonstrated that the data were insignificant at the  $.05$  level. Consequently, these results confirmed that the independent sample t-test could be performed to the pretest scores of the experimental and control groups. Accordingly, the independent sample t-test was performed between the pretest scores of the experimental and control groups and the obtained results are presented in Table 4.



**Table 4.** Results of the independent sample were performed between the pretest scores of the experimental and control groups.

Group	N	Mean	Std.Dev.	Df	T	p
Experimental	22	55.134	7.28	43	1.274	.210
Control	23	57.608	5.67			

As shown in Table 4, no statistically significant difference was found between the pretest scores of the experimental and control groups at the .05 level ( $t_{(43)} = 1.274$ ;  $p > .05$ ). Based on these results, it was concluded that the social responsibility levels of the students in the experimental and control groups were similar.

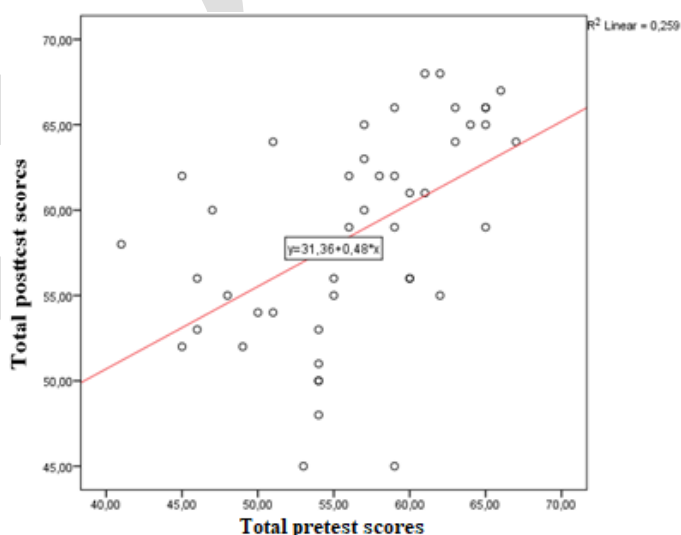
### The results of the One-way ANCOVA Conducted on the Posttest Scores of the Experimental and Control Groups

Before the analysis, posttest scores of the experimental and control groups were evaluated for the one-way ANCOVA assumptions. Therefore, normal distribution and homogeneity of the posttest scores of the experimental and control groups were examined. The descriptive statistics and the results of the normality tests and Levene's test for equality of variances were applied on the posttest scores of the experimental and control groups are presented in Table 5.

**Table 5.** The descriptive statistics and the results of the normality tests and Levene's test for equality of variances applied on the posttest scores of the experimental and control groups.

Groups	Descriptive Statistics			Shapiro-Wilk		Skewness	Kurtosis	Levene's test			
	N	Mean	Std.Dev.	Df	p			Levene Statistics	sd1	sd2	p
Experimental	22	60.22	1.204	22	.70	-.623	-.715	.320	1	43	.575
Control	23	57.08	1.351	23	.593	-.147	-.508				

As shown in Table 5, while skewness and kurtosis values of the posttest scores of the experimental group were found as .623 and -.715, respectively, the values of the control group were calculated as -.147 and -.508, respectively. Moreover, the posttest scores of the experimental and control groups were found as not significant at the .05 level in the Shapiro-Wilk and therefore, did not show excessive deviation from normal distributions. Furthermore, the results of Levene's test for equality of variances demonstrated that the variances were homogeneous since the test was not significant at the .05 level.

**Figure 3.** The relationship between the pretest and posttest scores of the experimental and control groups on the SRS.



In addition to these assumptions, the relationship between the pretest (the covariate variable of the study) and the posttest (the dependent variable of the study) scores of the experimental and control groups was examined before performing one-way ANCOVA. The scatter plot showing the relationship between the pretest and posttest scores of the experimental and control groups is shown in Figure 3.

As seen in Figure 3, a linear relationship was determined between the pretest (the covariate variable of the study) and the post-test (the study's dependent variable) scores of the experimental and control groups.

It was also examined whether there were significant differences between the experimental and control groups' pretest scores and the classroom variable to perform the one-way ANCOVA. The analysis results regarding the Classroom-pretest interaction for pretest scores of the experimental and control groups are shown in Table 6.

**Table 6.** Results of the classroom-pretest interaction

Source of Variance	Sum of Squares	Df	Mean of Squares	F	p
Corrected Model	674.649 <sup>a</sup>	31	224.883	8.952	.000
Classroom	28.343	1	28.343	1.128	.294
Pretest	561.108	1	561.108	22.337	.000
<b>Classroom-pretest</b>	<b>13.726</b>	<b>1</b>	<b>13.726</b>	<b>.546</b>	<b>.464</b>
Error	1030	41	25.120		
Total	156350	45			

As seen in Table 6, the Classroom-pretest interaction was determined as not significant at the .05 level ( $F_{1,41}=.546$ ;  $p>.05$ ). These results indicated that the within-group regression slopes are all equal. According to all analyses, it was concluded that both scores are suitable to perform the one-way ANCOVA to determine the effect of CtC teaching approach on students' social responsibility levels. The results of the one-way ANCOVA conducted for the posttest scores of the experimental and control groups are presented in Table 7.

**Table 7.** The results of the one-way ANCOVA conducted for the posttest scores of the experimental and control groups

Source of Variance	Sum of Squares	Df	Mean of Squares	F	p	Partial $\eta^2$	Power
Corrected Model	660.924 <sup>a</sup>	2	330.462	13.299	.000	.388	.996
Pretest	550.036	1	550.036	22.135	.000	.345	.996
<b>Group</b>	<b>219.295</b>	<b>1</b>	<b>219.295</b>	<b>8.825</b>	<b>.005</b>	<b>.174</b>	<b>.827</b>
Error	1043.654	42	243849				
Total	156350	45					

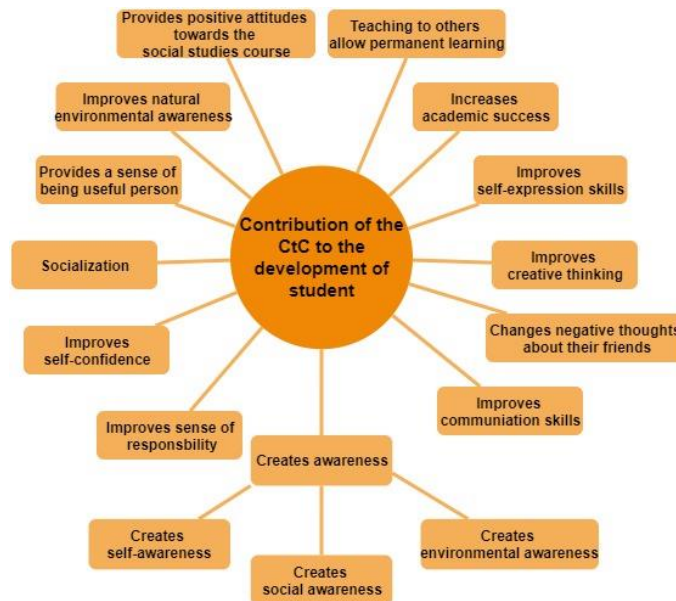
As shown in Table 7, a significant difference at the .05 level was determined between the posttest scores of the experimental and control groups that corrected according to the pretest scores ( $F_{1,42}=8.825$ ;  $p<.05$ ). Considering these results, the experimental procedure was decided as statically significant. Moreover, the effect size of the experimental procedure was also examined using partial  $\eta^2$  values. As displayed in Table 7, the partial  $\eta^2$  value was calculated as .174. Accordingly, the effect size of the experimental procedure was large. Furthermore, the power of the experimental procedure was also evaluated and calculated as .82. Therefore, the null hypothesis of the study, that is, The CtC approach has no impact on the social responsibility levels of the primary school students assumption is rejected by 82%, and the power of the experimental procedure was found to be greater than expected (Christensen, Johnson, & Turner, 2015).

Considering the analyses results discussed above, it was concluded that the CtC approach implemented in the social studies course had shown a significant impact on the social responsibility levels of the primary school students, the experimental procedure had a large effect, and its power was greater than expected. Qualitative data obtained from the study group including students in the experimental group, parents, and teacher were analyzed to deeply understand and explain how effective the CtC teaching approach is on students' social responsibility levels.



## Students' Opinions Regarding the Contribution of the CtC Teaching Approach

The findings acquired by analyzing the information obtained from students revealed that the CtC approach implemented in the social studies lesson had contributed to the development of students. These findings are shown in Figure 4.



**Figure 4.** Contribution of the CtC to the development of students

An examination of Fig. 4 shows that the obtained findings include items associated with social responsibility. The current study's findings showed that the CtC had contributed to improving some students' self-expression, creative thinking, and communication skills related to social responsibility. One of the students in the experimental group, Tamer stated that "he can express himself better as a result of the activities he conducted within the scope of the CtC by saying, in the past, I could not introduce myself well to others. Now I started to feel better about expressing myself (Student Interview (SI), 10.01.2019)". Selen explained that the CtC process contributed to her creative thinking skills by giving an example, "I had thought of something recently. I would bring something like a bin for the school bus. We would throw the garbage there (SI, 10.01.2019)". Omar believes that the CtC implemented in the social studies course had contributed to his communication skills by saying, "My social communication with people has improved. I could already speak well with people. I already have this ability. Here, I have increased this feature (SI, 10.01.2019)".

Other findings showed that the CtC had contributed to the development of a sense of responsibility related to social responsibility through improving their sense of responsibility, self-confidence, and a sense of being a useful person. One of these students, Ecem said that this activity made her feel responsible by stating, "I felt a sense of responsibility since we conducted an important, pleasant, and useful task (Student Product (SP), no date)". Büşra's anecdotal records indicated that she believes the activities they planned and implemented provided her self-confidence: "I explained something to our analyzing today and realized that my self-confidence has increased. Because I used to be excited when I was telling someone something. But now, I realized that I'm better (Anecdote Record (AR), 05.10.2018)." Moreover, Öznur stated that the clean-up activity made her feel a sense of being useful person by explaining, "I enjoyed garbage collection. Because at least we made something good for the environment (SI, 10.01.2019)".

Moreover, the obtained findings indicated that the CtC had contributed to the development of environmental and social awareness, socializing them, and helping to be aware of the natural environment, which are related to social responsibility. One of these students, Tamer said that the CtC

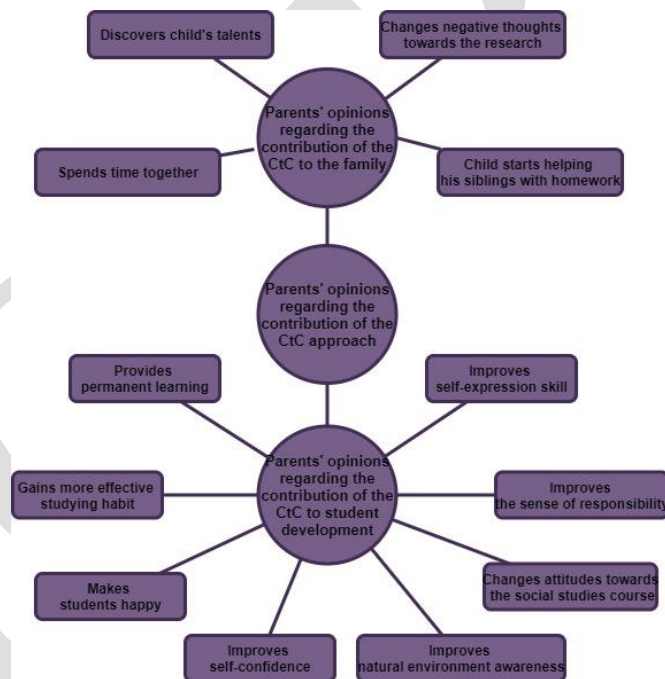


provided social awareness by stating “It made me feel that we shouldn’t think only about ourselves. It is not just us living in this World (SI, 10.01.2019)”. Ozan stated that it created environmental awareness by saying, “My opinion has changed. I don’t think the environment was so dirty. I’m surprised when there were so many. We didn’t care before (SI, 10.01.2019)”. Gökay said that the CtC made them socialize by saying “We became more social than all lessons. We meet with my friends at school every day. We socialize with them (SI, 10.01.2019)”. Additionally, Ecem stated that the CtC had improved their awareness towards the natural environment by saying: “It had changed me for the environment. When I was little, I didn’t care much about nature, but as I did such activities, I understood the state of nature (SI, 10.01.2019)”.

In addition to these, it was found that the CtC implemented in the social studies course provided students with permanent learning since they had to teach what they learned to others, increased their academic success, changed their negative thoughts about their friends, and provided positive attitudes towards social studies course.

### Parents’ Opinions Regarding the Contribution of the CtC Teaching Approach

The findings acquired by analyzing the information obtained from parents indicated that the CtC approach implemented in the social studies lesson provided some contributions to the development of the students and family. Findings associated with parents’ opinions regarding the contribution of the CtC approach to the development of students and families are shown in Figure 5.



**Figure 5.** Parents' opinions regarding the contribution of the CtC approach

As presented in Figure 5, most of the obtained findings are related to social responsibility. The results indicated that the CtC approach implemented in the social studies course improved students' sense of social responsibility according to parents’ opinions. Moreover, the research findings showed that some parents thought implementing the CtC in the social studies course contributed to the development of children's sense of responsibility and self-confidence. Ms. Işıl, one of the parents supporting this finding said “I constantly tell him that he has homework. I would follow as if I’m a student myself. For the first time, he said consciously, ‘I will do it’, and he did (Parent Interview (PI), 15.01.2019)”. Mr. Hakan, another parent, emphasized that the CtC contributed to the development of his child's self-confidence by saying,



I think the activities are useful. He was different before. His self-confidence has increased after he conducted the activities. Sometimes he was afraid of narrative things. I already told him last night. I said, 'You couldn't speak like this before.' He replied 'Now I'm speaking, dad,'. He was hesitant before (PI, 11.01.2019).

Moreover, it was found that some parents had the view that this process contributed to their children's natural environment awareness. Mr. Halil, one of these parents, stated that his child's awareness of the natural environment had increased by saying;

He began to be more concerned (sensitive) about the waste. For example, he said to me, 'We shouldn't throw anything out of the car. Sometimes, even if it's a little stuff, we've thrown some things a few times, we shouldn't do this anymore' he said (PI, 14.01.2019).

Besides, some parents stated that the CtC approach had contributed the development of the self-expression skills of their children. Mrs. Hande, a parent suggesting this view said, "Now she started to make proper sentences. I always wanted her to make good sentences to express herself better. Finally, my daughter did it fondly. Her self-expression skills have improved. Because she enters into such settings (PI, 17.01.2019)".

In addition to the outcomes mentioned above, parents also believe that the CtC practiced in the social studies course changed their children's attitudes towards the social studies course, provided them a more effective studying habit and permanent learning. Moreover, parents stated that the CtC also provided some benefits themselves. For example, they said that they discovered their child's new talents, their child started helping his sibling with his homework, they spent more time together, and their negative thoughts towards the research had changed.

### **Social Studies Teacher's Opinions Regarding the Contribution of the CtC Teaching Approach**

During this research, findings regarding the contributions of CtC on the development of the students, teaching-learning process of social studies course, and the social studies teacher. Social studies teacher's opinions regarding the contribution of the CtC approach are shown in Figure 6.

As seen in Figure 6, most of the findings are related to social responsibility. As a result of this research, the social studies teacher stated that the CtC contributed to the development of students' self-expression and creative thinking skills associated with developing a sense of social responsibility in students. Regarding the improvement of the students' self-expression skills, the social studies teacher said;

There are differences between the classroom we implemented the approach in and the other in terms of children's positive attitude, expressing themselves, and participating in the class. For example, Cansu, whom I had trouble getting her to speak with, talked about the negative aspects of technology for almost three minutes today (Interview of Social Studies Teacher (ISST), 14.02.2019).

Regarding the contribution of the CtC to the students' creative thinking skills, the social studies teacher stated "I was happy to see the evaluation of the progress by children during the evaluation and expansion stages, especially the emergence of different ideas regarding the expansion (ISST, 10.12.2018)".

Moreover, the social studies teacher suggested that the CtC had improved student's social responsibility. In this regard, the social studies teacher said;

I think maybe 10-15% of the students are aware of what they are doing. Of course, this will be more sensitive when they discover it themselves. However, I also observed that some students are discovered it. During those expansion activities, I saw that they are aware of this. During those activities, their speeches and writings indicated this (ISST, 10.12.2018).

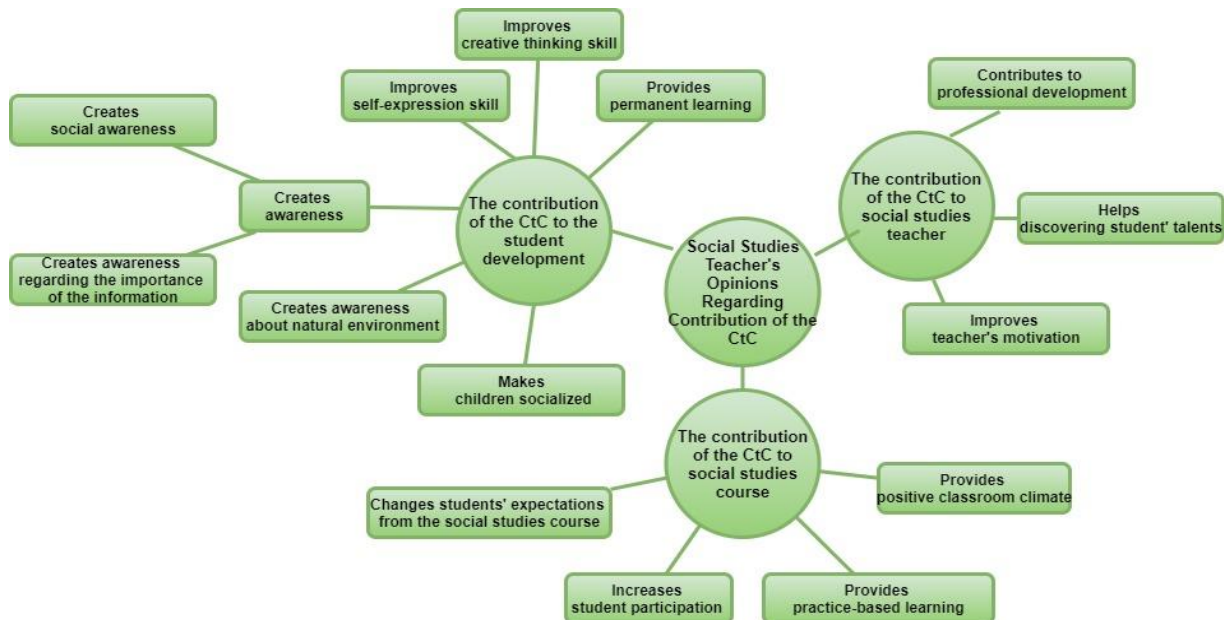
Furthermore, the obtained results implied that the social studies teacher believed that the CtC improved student's awareness of the natural environment as well, which is associated with social responsibility. The social studies teacher explained that especially the 'flyer preparation' and 'clean-up the





environment’ activities performed by the students during the process increased the student's awareness of the natural environment as follows:

There was an activity in the preparation process before the garbage collection activity (flyer preparation). Students were motivated in that activity. Therefore, we have already prepared them mentally and spiritually. Regarding the subject, they have learned about environmental problems, nature and environment have become uninhabitable, and we must respect nature. In my opinion, as a result, children gained this awareness and felt a responsibility to do something for nature, the environment, or for living things (ISST, 14.02.2019).



**Figure 6.** Social Studies Teacher's opinions regarding the contribution of the CtC

Additionally, the CtC was identified by the social studies teacher as a mechanism that socializes children, contributes to the awareness regarding the importance of the information, and provides permanent learning. On the other side, the social studies teacher also expressed that the CtC provided some benefits such as contribution to his professional development, discovering students' talents, and improving his motivation. Moreover, according to the social studies teacher, the CtC also contributes to the education process of social studies. Furthermore, the social studies teacher stated that the CtC offers a positive classroom environment, provides learning from experience, and enables effective participation of the students in the lesson. Finally, it was also stated that after implementing the CtC method, students' expectations from the social studies course were changed.

## RESULTS, DISCUSSION, and RECOMMENDATIONS

The present study results revealed that the CtC approach implemented in the primary social studies course increased the students' level of social responsibility. In studies carried out by Demir et al. (2009), Serpell, Mumba and Chansa-Kabali (2011) and Özyürek et al. (2016) also found a positive and significant impact of CtC approach on students in different grades. Additionally, many reports supporting these findings can be found in the literature. For example, Gibbs, Mann and Mathers (2002) suggested that the CtC promoted students' understanding and life skills needed for a more livable world. Serpell (2011) defined the CtC as an approach focusing on social responsibility awareness. As explained above, the results described in the present study are consistent with the related published reports. Therefore, it can be claimed that the CtC contributes to developing a sense of responsibility in students.

Based on the views of the students, parents, and the social studies teacher, CtC contributed to students' self-expression skills. This finding is also consistent with previous studies (Somerset, 1988; Gilkes,



1997; Hanbury, 1997; Kattel & Carnegie, 1997; Demir et al., 2009). Moreover, Freedman and Hunting (2003) emphasized that the CtC helps to improve students' communication and life skills. Therefore, considering the results of these studies and explanations, the CtC can be identified as an approach contributing to students' communication and life skills.

The CtC's contribution to the students on raising awareness and sensitivity toward the natural environment is also one of the results of this research. In a study by Somerset (1988), it was demonstrated that the CtC not only contributes to students' awareness but also contributes to the awareness of the people with whom students come in contact. The results of the study carried out by Knight, Grantham-McGregor, Ismail and Ashley (1991) indicated that the CtC had a significant positive impact on the test scores of the students in the experimental group regarding the conserved and healthy environment. According to a study conducted by Hanbury (1997), the CtC approach enabled children to learn how to protect the environment. In a research carried out in Bangladesh by UNICEF (2012), the students in the experimental group exhibited more developments regarding sensitivity toward the natural environment than those in the control group after implementation of the CtC. In addition to the studies mentioned above, Bailey, Hawes, and Bonati (1992), suggested that the CtC can be used to effectively teach subjects related to the environment. Gibbs, Mann and Mathers (2002) stated that the CtC is more effective when used in the subjects associated with the social issues where students can experience. According to these findings of studies, it can be suggested that the CtC helps to promote natural environment awareness in students.

It was concluded in the study that CtC contributed to the students' creative thinking skills according to the social studies teacher's opinion. Similar results were reported in the studies carried out by Gilkes (1997), Demir et al. (2009) and UNICEF (2012). Moreover, in a study by Chalker (1997), parents stated their children started developing creative skills due to the CtC. In addition to these reports, Pradhan (2007) emphasized that CtC enabled students to be aware of their own creative features. In this regard, the obtained findings and the supportive studies indicated that the CtC contributes to the students' creative thinking skills.

Based on the students' and parents' views, this study also provided evidence that the implementation of the CtC in the social studies course contributes to the development of the sense of social responsibility in the students. The contribution of the CtC to the students' social responsibility was also determined by the reports of Ahmad (1997) and Demir et al. (2009). Furthermore, Özyürek et al. (2016) also found that activities conducted within the scope of the CtC helped students learn to take responsibility. Furthermore, Gibbs, Mann, and Mathers (2002) explained how CtC encourages students to take responsibility. According to these results, it can be said that the CtC makes contributions to the development of students' sense of social responsibility.

Bailey, Hawes, and Bonati (1992) found that the CtC improves self-confidence in children since children plan and implement the activities regarding the CtC themselves. A similar finding was obtained by Gibbs, Mann and Mathers (2002), the CtC projects that require children's active participation improves their self-confidence. There are many reports published in the literature support these findings (Somerset, 1988; Gilkes, 1997; Mwebi, 2012; UNICEF, 2012; Demir et al., 2009; Özyürek et al., 2016). Similar to the previous reports, the current study also provided evidence about the contribution of the CtC to the self-confidence in students based on the views of students and parents. Therefore, it can be argued that the CtC provides a contribution to the students' development of self-confidence.

The result of the present study showed that the CtC helps students to develop a sense of being a useful person in society. Similarly, in a study of Somerset (1988), it was found that the CtC enabled students to be aware of being useful individuals to society. The results of a study carried out by Kattel and Carnegie (1997) demonstrated that children were aware that their contribution to their schools and society is valuable through the activities held within the scope of the CtC. Moreover, Hanbury (1993) stated that children felt a sense of being an important and useful person to society because the CtC



requires students to take responsibility and develop activities for the solution of a social problem. Gibbs, Mann, and Mathers (2002) stated that the CtC approach enabled the development of the sense of belonging among students since the CtC provides children to develop activities regarding the solution of a social problem within the society they live in. Based on the results of the present study and supporting reports, the authors claim that the implementation of the CtC contributes to students developing a sense of being a useful person to society.

In addition to the findings of this study, previous studies demonstrated some other contributions of the CtC on the students, such as collaborative work, questioning, research, critical thinking, problem-solving, and decision-making skills. Additionally, it was also found that the CtC approach helps students to improve self-control, organization, self-assessment, literacy, planning, and time management skills. Furthermore, recent reports suggest that the CtC has a positive impact on some students' skills, such as the development of a sense of self-esteem and social belonging, accepting different ideas, healthy eating, being clean, and being aware of the opportunities offered by society. In addition to these, the implementation of the CtC improves family, school, and community partnership, social awareness, and creativity of teachers (Knight, Grantham-McGregor, Ismail & Ashley, 1991; Bailey, Hawes, & Bonati, 1992; Hanbury, 1993; Ahmad, 1997; Chalker, 1997; Eunson, 1997; Gilkes, 1997; Hanbury, 1997; Kattel & Carniege, 1997; Breslin, Madrid, & Mhhize, 1998; Gibbs, Mann, & Mathers, 2002; Pradhan, 2007; Alazab, Elsheikh & Kamal, 2008; Ataman, 2009; Demir et al., 2009; Serpell, Mumba, & Chansa-Kabali, 2011; Mwebi, 2012; UNICEF, 2012; Özyürek et al., 2016). Finally, based on the present study's findings and previous reports, it can be argued that the CtC approach helps students gain valuable knowledge, skills, values, attitudes, behaviors, and awareness related to social responsibility.

Based on the findings obtained in the present study, the authors make the following recommendations regarding the implementation and further studies:

### **Recommendations regarding the implementation**

- Teachers can use the CtC approach to provide students with social responsibility awareness or increase students' level of social responsibility.
- Teachers can use the CtC approach to help students gain many skills and values associated with social responsibility in the curriculums.
- Teachers can use the CtC approach for students' personal, social, and emotional development.
- Teachers can use the CtC approach to strengthen the links between students, school, and society.

### **Recommendations for further studies**

- Experimental or quasi-experimental studies may be conducted to examine the impact of the CtC on some variables.
- Experimental or quasi-experimental studies may be conducted to examine the effect of a dependent variable on the primary school students' social responsibility levels.
- The implementation of the CtC in different courses should be examined in future studies.
- Follow-up studies should include relational research to determine the relationship between social responsibility and different variables.
- Relational research may be conducted to identify the variables predicting social responsibility in primary school students.
- Further studies may include research determining the social responsibility perceptions of primary school students and social studies teachers.



## Ethics and Conflict of Interest

This article is based on a PhD dissertation conducted under the direction of the second author by the first author in the area of Social Studies Education at the Anadolu University Institute of Educational Sciences. This research was funded by Anadolu University the Scientific Research Projects Department (Grant Number: 1804E079). The authors declared no potential conflicts of interest.

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