



**OBTAINING OF HELPFULNESS VALUE
IN THE SECONDARY EDUCATION MATHEMATICS
CURRICULUM BY CREATIVE DRAMA ACTIVITIES**

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Abstract:

“Values Education”, which added to Mathematics Teaching Program at the Turkish Academic Year of 2017-2018, is revised and updated as “Our Values” on January of 2018. “Our Values” based on a grown value system that aims to maintain the existence of societies preserve the unity and togetherness of societies and have the real educational success like every stage of individuals’ life. The Ministry of National Education has determined the base values, which should be gained during the education of Mathematics, as justice, friendship, honesty, patience, respect, love, responsibility, patriotism and helpfulness. The aim of this study is making the students realize their own values and making them gain the helpfulness values by using creative drama activities during the education of Mathematics. In this study, “helpfulness value”, which is under the topic of “Our Values” of Mathematics Teaching Program, was tried to put into practise by creative drama activities. In the study, experimental method which contains pretested and posttested control group is used in order to show the behaviour difference between experimental group, which activity based creative drama method was applied, and the control group, which activity based creative drama method was not applied. This study is designed as a controlled experimental study with pretest-posttest. The group of study was consisted 106 students, which studying in 3 different provinces (Aydın, Afyon, Uşak) in the same region. Both experimental and control group was consisted by 53 students. In the study, data were collected from “helpfulness scale” which developed by Demirci (2017). As a result of the study, the helpfulness scale score of experimental group, which activity based creative drama was

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applied is high but there is no meaningful difference between helpfulness scale scores of experimental group and control group.

Keywords: Mathematics teaching, values education, creative drama, helpfulness

1. Introduction

Values are significant for ensuring that societies continue to exist, maintain unity and solidarity, and individuals live in peace and security within a society. Furthermore, a mature values system is critical for individuals to attain the real success in their education lives as well as in any other stage of their lives. Although the primary goals of education processes throughout the history have been to provide information and employment to individuals, the topic of values has played an effective role in establishing human behavior, character and personality. According to Kohlberg (1981), the fundamental function of a school is to maintain the core values that society attaches importance to and to pass these values on to the next generations. The education system aims to instill these values in individuals. For this reason, systematic and effective implementation of values education in our schools becomes a necessity. It is a widely accepted view in the educational environments that it would be wrong to limit values education to specific courses, and the necessary importance should be given to this subject in all courses, and even in all stages of life. However, studies show that values are rarely taken into consideration in the field of mathematics teaching, the necessary importance is not attached to values education while the curriculum is being prepared and the general focus is on academic success, and that teachers, one of the most important elements of mathematics education, do not believe in the necessity of teaching values in mathematics (Bishop, Clarkson, FitzSimons and Seah 2000; Bishop, FitzSimons, Seah and Clarkson, 1999; Clarkson, FitzSimons, Bishop and Seah, 2000). However, it should not be forgotten that values playing a major role in the personal development of students, will also have a major impact on academic success in mathematics (Doruk & Kaplan, 2012).

In their study conducted with school principals in Aydın province, Aladağ and Akyol (2017) examined the views of school administrators towards implementation of values education at schools. They pointed out that the principals gave importance to the values of love, respect, and benevolence. Moreover, they expressed that teachers were adequate at implementing values education, and recommended additions to be made to education faculty programs related to values education to achieve better implementation of values education at schools.

The cognitive, emotional and action dimensions required for moral character can be developed in a balanced manner by teaching values through hidden programs and direct education. Value education becomes more effective as the values taught through activities influence teacher and administrator behavior, ceremonies and discipline approach, in other words the hidden curriculum dimension (Akbas, 2008).

In the 2017-2018 academic years, the Values Education included in the Mathematics Curriculum by Ministry of Education was revised and updated as "Our Values" in January 2018 (MoNE, 2018).

Halstead (1996) stated that student-centered active learning strategies, projects, applied activities, collaborative learning, and group work would be more effective in terms of the methods and techniques that can be used most frequently when teaching values in courses. Suharjo (2007) has noted that problem-solving activities and collaborative learning are useful methods for teaching values in mathematics courses. All of these can be realized in mathematics teaching through creative drama activities.

In order to mobilize imagination of students, develops their own thoughts, enables them to empathize, and improve their awareness by developing their communication skills and creativity the method of Creative Drama is used. Creative drama creates social and psychological awareness in students towards others. It improves self-confidence and decision-making skills (Özsoy, 2003, 2017).

1.1 Research Question

- What is the effect of the creative drama method on instilling the helpfulness value that is implicitly included in the mathematics curriculum?

1.2 Research Aim

The aim of this study is to enable students to realize their own values while learning mathematics by using the creative drama method and to instill the helpfulness value in the students.

1.3 Research Limitations

This study is limited to 106 eighth grade students in three secondary schools affiliated to the Ministry of National Education in Uşak, Afyon and Antalya provinces.

2. Method

This section includes explanations about the research design, sample, data collection tools, collection and analysis of data.

2.1 Research Design

This study is designed as a controlled experimental study with pretest-posttest.

2.2 Participants (Research Sample)

106 eighth grade students attending three secondary schools affiliated to the Ministry of National Education participated in this study. While selecting the schools where the study to be applied, the schools that the researchers worked were preferred.

Table 1: The Number of Experimental and Control Groups

City	Experimental	Control	Total
Antalya	11	11	22
Uşak	19	19	38
Afyon	23	23	46
Total	53	53	106

2.3 Data Collection

In this study, eighth grade students in each secondary school were divided into experimental and control groups. Pretest was applied to experimental and control groups and then the experimental group was taught the courses using creative drama activity while education was continued in the control group with traditional teaching. As a result of the applications, posttest was applied to experimental and control groups and the obtained data was analyzed.

2.4 Data Collection Tools

A helpfulness scale developed by Demirci (2017) was used as data collection tool in this study.

2.5 Data Analysis

The data obtained at the end of the study were analyzed using the SPSS package program. Secondary schools included in the study were initially assessed within themselves. In each school, the control and experimental groups were examined within themselves by using dependent variable t-test.

Experimental and control groups were then examined using the independent variable t-test.

3. Results

The research questions for Antalya/Serik, Uşak/Banaz and Afyon are as follows:

- Is there a difference in helpfulness scores of the experimental group in the pretest and posttest?
- Is there a difference in helpfulness scores of the control group in the pretest and posttest?
- Is there a significant difference between the helpfulness scores of the experimental group and control group?

Criteria:

- Level of Meaningfulness alfa 0,05.
- Test to be used: Helpfulness scores of single dependent variables.

Two samples; Pretest and posttest points are considered as dependent samples because the two samples in the hand are two test results applied to the same student group at different times. In this case, t test, which applied to the dependent groups, or Wilcoxon test which is the alternative of non-parametric, is used for comparison of

averages. Assumptions should be provided because the t test, which applied to dependent groups, is a parametric method.

Assumptions:

- Dependent variable should be continuous.
- The dependent variable must be at any rate of equivalent interval scale.
- The distribution of difference scores should be normal.

In the case of provided assumptions t test is used; if the assumptions are not provided Wilcoxon test is used. First two assumptions are provided.

To examine the normal distribution of difference scores:

Ho: Difference scores of the experimental group are normally distributed.

Ho: Difference scores of the control group are normally distributed.

In the tables below, normality distributions related to Antalya/Serik, Uşak/Banaz, Afyon are shown.

Table 2a: Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Antalya experimental group difference	0,196	11	0,200*	0,928	11	0,389
Antalya control group difference	0,194	11	0,200*	0,943	11	0,562

Table 2b: Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Uşak experimental group difference	0,136	19	0,073	0,972	38	0,458
Uşak control group difference	0,095	19	0,200*	0,929	38	0,019

Table 2c: Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Afyon experimental group difference	,170	23	,085	,957	23	,409
Afyon control group difference	,121	23	,200*	,960	23	,470

Since the sample was smaller than 50 in all three groups, Shapiro-Wilk statistics was checked. When the Table 2a is checked, sig value of the experimental group is 0.389 and it is bigger than alpha 0.05. Ho nonexistence hypothesis is accepted. So, the distribution of difference scores of experimental group is normally distributed.

When the Table 2b is checked, the sig value of experimental group is 0.458 and it is bigger than alpha 0.05. Ho nonexistence hypothesis is accepted. So, the distribution of difference scores of experimental group is normally distributed. The sig value of the experimental group is 0.085 and it is bigger than alpha 0.05.

When the Table 2c is checked, H_0 nonexistence hypothesis is accepted. So, the distribution of difference scores of experimental group is normally distributed.

When the Table 2a is checked, the sig value of the control group is 0.562 and it is bigger than alpha 0.05. So, the distribution of difference scores of control group is normally distributed. When the Table 2b is checked, the sig value of the control group is 0.019 and it is bigger than alpha 0.05. So, the distribution of difference scores of control group is normally distributed. When the Table 2c is checked, the sig value of the control group is 0.200 and it is bigger than alpha 0.05. So, the distribution of difference scores of control group is normally distributed.

Since, all the assumptions are provided; the t test will be used for matched groups.

Table 3a: Dependent Sample t-test

Paired Samples Test

	Paired Differences					T	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	%95 Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Antalya experimental posttest Antalya experimental pretest	1,54545	5,83718	1,75998	-2,37602	5,46693	,878	10	,400
Pair 2 Antalya control posttest Antalya control pretest	-1,00000	6,92820	2,08893	-5,65443	3,65443	-,479	10	,642

Table 3b: Dependent Sample t-test

Paired Samples Test

	Paired Differences					T	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	%95 Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Uşak experimental posttest Uşak experimental pretest	0,23684	4,96710	,80577	-1,39580	1,86949	,294	37	,770

Table 3c: Dependent Sample t-test

Paired Samples Test

	Paired Differences					T	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	%95 Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Afyon experimental posttest Afyon Experimental pretest	,56522	6,41607	1,33784	-2,20930	3,33974	,422	22	,677
Pair 2 Afyon control posttest Afyon control pretest	-,52174	6,02170	1,25561	-3,12572	2,08224	-,416	22	,632

As a result of applied t test, when the Table 3a is checked, the corresponding p value of average value of difference points of experimental group 1.545 is 0.400. This value is bigger than alpha 0.05. So, Ho nonexistence hypothesis is accepted. There is no difference between scores of pretest and posttest of the experimental group. So the difference is so small which can be explained by random errors. The corresponding p value of average value of difference scores of control group -1.000 is 0.642. This value is bigger than alpha 0.05. So, Ho nonexistence hypothesis is accepted. There is no difference between scores of pretest and posttest of the control group. So the difference is so small which can be explained by random errors.

When the Table 3b is checked the corresponding value of average value of difference scores of experimental group 0.23684 is 0.770. This value is bigger than alpha 0.05. So, Ho nonexistence hypothesis is accepted. There is no difference between scores of pretest and posttest of the experimental group. So the difference is so small which can be explained by random errors. The corresponding p value of average value of difference scores of control group -1256 is 0.567. This value is bigger than alpha 0.05. So, Ho nonexistence hypothesis is accepted. There is no difference between scores of pretest and pretest of the control group. So the difference is so small which can be explained by random errors.

When the Table 3c is checked, the corresponding p value of average value of difference scores of experimental group 0.56522 is 0.677. This value is bigger than alpha 0.05. So, Ho nonexistence hypothesis is accepted. There is no difference between scores of pretest and pretest of the experimental group. So the difference is so small which can be explained by random errors. The corresponding p value of average value of difference scores of control group -5.52174 is 0.692. This value is bigger than alpha 0.05. So, Ho nonexistence hypothesis is accepted. There is no difference between scores of pretest and final test of the control group. So the difference is so small which can be explained by random errors.

As the last research question, let's examine the question whether there is a significant difference between the experimental group and the control group's helpfulness points.

Criteria:

- Alpha 0.05 is considered for level of meaningfulness.
- Test to be used: The groups of control and experimental are 2 independent samples, helpfulness points are dependent variables.

According to this, there are two independent samples and 1 dependent variable. Therefore, t test or Mann-Whitney U test should be used on 2 independent samples. Since, the t test, which is applied to the independent groups is a parametric method, all the assumptions should be provided.

Assumptions:

- Dependent variable should be continuous.
- The dependent variable must be at any rate of equivalent interval scale.
- The helpfulness points should be normally distributed on experimental and control groups.

In the case of provided assumptions, t test is used; if the assumptions are not provided Mann Whitney is used. First two assumptions are provided. The third assumption requires normality examination.

To examine the normal distribution of difference points:

H₀: Pre-test helpfulness points of experimental group are normally distributed.

H₀: Pre-test helpfulness points of control group are normally distributed.

H₀: Posttest helpfulness points of experimental group are normally distributed.

H₀: Posttest helpfulness points of control group are normally distributed.

Table 4a: Experimental and Control Normality Test

Tests of Normality ^{b,c}							
	Groups	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Antalya pretest	experimental	0,145	11	0,200*	0,922	11	0,338
	control	0,182	11	0,200*	0,932	11	0,436
Antalya posttest	experimental	0,196	11	0,200*	0,856	11	0,051
	control	0,139	11	0,200*	0,964	11	0,823

Table 4b: Experimental and Control Normality Test

Tests of Normality ^{b,c}							
	Groups	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Uşak pretest	experimental	0,127	19	0,200*	0,923	38	0,348
	control	0,122	19	0,200*	0,923	38	0,438
Uşak posttest	experimental	0,126	19	0,200*	0,865	38	0,057
	control	0,138	19	0,200*	0,966	38	0,778

Table 4c: Experimental and Control Normality Test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Afyonexp.pretest	,186	23	,039	,875	23	,008
Afyonexp.posttest	,158	23	,142	,913	23	,047
Afyoncontrolpretest	,205	23	,013	,883	23	,012
Afyoncontrolposttest	,279	23	,000	,773	23	,000

Since three groups' sample numbers are less than 50, Shapiro-Wilk statistics is checked.

When the Table 4a checked, both sig values of pretest and posttest of experimental group are bigger than alpha 0.05. Ho nonexistence hypothesis is accepted. So, the distribution of difference scores of experimental group is normally distributed. Both sig values of pretest and posttest of control group are bigger than alpha 0.05. So, the distribution of scores of difference of control group is normally distributed.

When the table 4b is checked, both sig values of pretest and posttest of experimental group are bigger than alpha 0.05. Ho nonexistence hypothesis is accepted. So, the distribution of difference scores of experimental group is normally distributed. Both sig values of pretest and posttest of control group are bigger than alpha 0.05. So, the distribution of scores of difference of control group is normally distributed.

When the Table 4c is checked, both sig values of pretest and posttest of experimental group are bigger than alpha 0.05. Ho nonexistence hypothesis is accepted. So, the distribution of difference scores of experimental group is normally distributed. While the calculated sig value of pretest of control group is bigger than alpha 0.05, the sig value of posttest is smaller than alpha 0.05. So posttest point distribution of control group is not normally distributed. Since all the assumptions are provided for Antalya and Uşak, t test will be used on two independent samples. Since the posttest point distribution of control group for Afyon is not normally distributed, Mann-Whitney U test will be used.

- T-test on two independent samples for Antalya and Uşak;

Nonexistence hypothesis:

Ho: There is no meaningful difference between posttest helpfulness points of control and experimental groups.

Ho: There is no meaningful difference between pretest helpfulness points of control and experimental groups.

Table 5a: Descriptive Table of Experimental and Control Groups

Group Statistics					
	Groups	N	Mean	Std. Deviation	Std. Error Mean
Antalya posttest		11	31,4545	3,93354	1,18601
	control	11	28,4545	4,67683	1,41012
Antalya pretest		11	29,9091	4,03620	1,21696
	control	11	29,4545	3,93354	1,18601

Table 5b: Descriptive Table of Experimental and Control Groups

Group Statistics					
	Groups	N	Mean	Std. Deviation	Std. Error Mean
Uşak posttest		19	32,47	7,77	1,17
		19	27,48	4,68	1,16
Uşak pretest		19	28,90	3,07	1,21
	control	19	27,98	3,97	1,17

Table 5c: Descriptive Table of Experimental and Control Groups

Ranks				
	Groups	N	Mean Rank	Sum of Ranks
Afyon pretest	A	23	22,85	525,50
	B	23	24,15	555,50
	Total	46		
Afyonpostest	A	23	23,72	545,50
	B	23	23,28	535,50
	Total	46		

When the tables are checked, it is seen that the helpfulness scores of experimental group are increased. In the control group, on the contrary, there is a decrease in the helpfulness scores. To understand the table enough, the table of t test will be explained.

Table 6.a: Experimental and Control Groups T test Independent Samples Test

Antalya		Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
								Lower	Upper	
Experimental posttest	Equal variances assumed	0,399	0,535	1,628	20	0,119	3,00000	1,84256	-,84352	6,84352
	Equal variances not assumed			1,628	19,429	0,120	3,00000	1,84256	-,85077	6,85077
Experimental pretest	Equal variances assumed	0,008	0,931	0,267	20	0,792	0,45455	1,69929	-3,09012	3,99921
	Equal variances not assumed			0,267	19,987	0,792	0,45455	1,69929	-3,09027	3,99936

Table 6.b: Experimental and Control Groups T test

Independent Samples Test										
Uşak		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Experimental posttest	Equal variances assumed	0,37	0,57	1,68	19	0,17	3,00	1,85	-,88	5,84
	Equal variances not assumed			1,67	20,20	0,18	3,00	1,88	-,86	5,85
Experimental pretest	Equal variances assumed	0,00	0,87	0,25	19	0,82	0,47	1,70	-2,36	4,00
	Equal variances not assumed			0,25	19,87	0,88	0,46	1,78	-5,25	3,46

When the Table 6a is checked, the variance homogeneity must be considered to explain the table. For both control and experimental group is examined to explain the table, it is seen that sig value is bigger than meaningfulness level 0.05. So, the variances are homogeneous. When the first row is examined on the table, it is seen that of sig value is 0.119 so it is bigger than accepted meaningfulness level 0.05. So the nonexistence hypothesis must be accepted. So, there is no meaningful difference between posttest helpfulness scores of control and experimental groups. Again, when the third row is examined sig value is 0.792, so it is bigger than meaningfulness level 0.05. Therefore, nonexistence hypothesis must be accepted. So, there is no meaningful difference between posttest helpfulness scores of control and experimental groups

When the Table 6b is checked, the variance homogeneity must be considered to explain the table. For both control and experimental group is examined to explain the table, it is seen that sig value is bigger than meaningfulness level 0.05. So, the variances are homogeneous. When the first row is examined on the table, it is seen that of sig value is 0.57 so it is bigger than accepted meaningfulness level 0.05. So the nonexistence hypothesis must be accepted. So, there is no meaningful difference between posttest helpfulness scores of control and experimental groups. Again, when the third row is examined sig value is 0.25, so it is bigger than meaningfulness level 0.05. Therefore, nonexistence hypothesis must be accepted. So, there is no meaningful difference between posttest helpfulness scores of control and experimental groups.

Table 6c: Afyon Mann Whitney U Test Statistics

	Pretest	Posttest
Mann Whitney U	249,500	259,500
Wilcoxon W	525,500	535,500
Z	-,332	-,110
AsympSig (2-tailed)	,740	,912

According to Table 6c, since the sig value (0.740) is bigger than alpha (0.05), there is no meaningful difference observed between order averages. Since posttest sig value (0.912) is bigger than alpha (0.05), there is no meaningful difference observed between order averages.

In the consisting of 46 students Afyon group, which consists of 23 students from experimental group and 23 students from control group, according to result of Mann-Whitney U test, which applied to show whether there is a meaningful difference between pretest points of control and experimental groups, or not, there is no meaningful difference observed between control and experimental groups ($U=259,500$, $p>0,05$).

It could be said that there is no meaningful effect of drama study, which practiced on experimental group, on helpfulness scores which practiced on control group.

4. Conclusion

The aim of this study was to enable students to realize their own values while learning mathematics by using the creative drama method, and to instill the value of helpfulness in the students. In this study, the pretest scores of the helpfulness scale administered to the control and experimental groups prior to the application and the posttest scores of the experimental group in which creative drama method was applied and the control group in which traditional education was continued were analyzed.

The average score of the experimental group in which creative drama activity was performed was higher than the group that did not participate in the drama activity. However, this difference was not significant. The difference was very small and could be explained with random errors.

1. A decrease was observed in the average score of the control group in which creative drama activity was not performed. Similarly, no difference was found between the pretest and posttest scores of these experimental and control groups.
2. Based on the pretest results applied prior to creative drama activity, it can be said that the helpfulness scores of the students were high. A socially high helpfulness score could be the reason why drama activity did not result in a significant difference in instilling the value of helpfulness to students.
3. No significant difference was found between the pretest and posttest scores of experimental and control groups.

Based on the data obtained in this study, following recommendation can be made:

1. The number of items in the scales to be applied to measure the value of helpfulness can be increased.
2. The implementation of drama activities in values education can be extended and therefore the students can better internalize the curriculum as well as the values education through drama.
3. Creative drama method can be used application to different values in different course topics.

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Appendix 1: Drama Activity Plan

Grade: 8

Subject: Geometric objects

Terms or concepts: Base, height, surface area, pyramid, cylinder, prism.

Acquisitions:

1. Recognizes the orthogonal prisms, determines its basic elements, builds it and draws its development.
2. Determines the basic elements of orthogonal circular cylinder, builds it and draws its development
3. Composes the surface area relation of orthogonal circular cylinder, solves relevant questions.
4. Composes the volume relation of orthogonal circular cylinder, solves relevant questions.
5. Recognizes the orthogonal pyramid, determines its basic elements, builds it and draws its development.
6. Recognizes the orthogonal cone, determines its basic elements, builds it and draw its development.

Time: 40 minutes + 40 minutes (2 class hours)

Method: Creative drama

Techniques: role-playing, improvisation, expert role approach, small group work, teacher's role, brainstorm,

Material: music player, paper, pen, pencil, eraser, scale, ruler.

Warm Up: Students are asked to take the shape of a circle. One of the students is asked to be volunteer and take place at the centre of the circle. The volunteer calls another name and the student whose name was called by volunteer, becomes the new volunteer. New volunteer calls another name and the student whose name was called by new volunteer, becomes the new volunteer. Students are asked to take the shape of a circle. Students are asked to find an adjective related to their initials and find a unique symbol by their hands. This rule starts with the student on the right side of the teacher and continues until the teacher comes back.

Improvisation: The teacher tells the following story to his students.

Story: There was a beautiful city, which peaceful, cheerful and happy people were living in. A beautiful city which flowing oil on its mountains, flowing honey on its plains. In this city, Youngers were always respectful to elders and elders were always warm-hearted to the Youngers. They were living happily in this city. They were always understanding to each other and whenever one of them needed help, the others were helping him immediately. Love was always in their mouth and heart. This lovely ambiance helped them to be good person.

While they were living their hopeful and peaceful life, something sad has happened in the city.

What do you think has happened in this city?

They realised that an earthquake was happening. There was no loss of life during the earthquake but they recognized that some minor injuries have occurred on some people but there was a big problem. All the buildings were tumbling down.

Now, we want to build a city. A very special city...

This is **City Of Prisms!**

Students in the class are divided into two groups.

Each group draws a common new city plan.

Evaluation:

- How have you been feeling from the beginning of the activity?
- How was the feeling of helping homeless people with city of prisms?
- Where the people in the need of help can go?
- What is needed to infrastructure of the city?

Appendix II: Views from the Activity







Acknowledgement

The use of the photos has been allowed by the students and their parents.

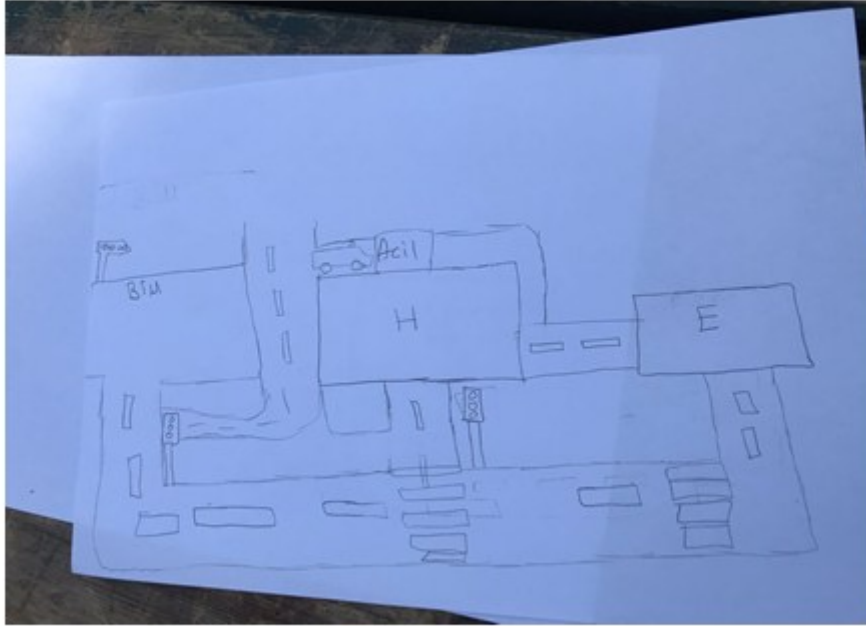
Appendix III: Student Projects



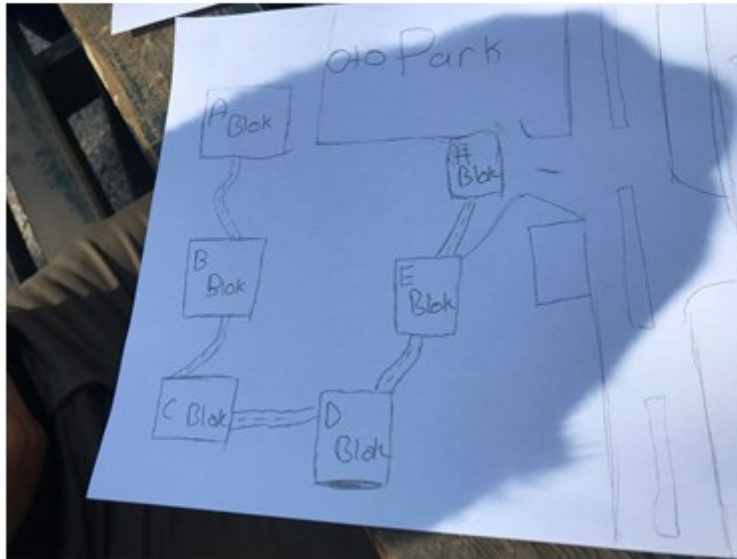
Nesrin Özsoy 'Yaratıcı Drama ve Yardımseverlik' İCMMME 2018 Ordu



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