THE EFFECT OF INTERDISCIPLINARY EDUCATION IN A PRIMARY SCHOOL'S 5TH GRADE VISUAL ARTS CLASS ON HOW STUDENTS REPRESENT LOVE[1]

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ABSTRACT

The purpose of this study is to review the effect of a "love"-themed interdisciplinary visual arts education in a primary school's 5th grade class on the way students express the concept of "love" through different representations (drawing and verbal). A random pattern with a final test group had been used during the quantitative part of the mixed model study and a phenomenology pattern was used for the qualitative part. The practical part of the study was performed in a public middle school in Diyarbakır during the 2014-2015 academic year. The study group consisted of a total of 52 students, 26 from the experimental and 26 from the control group. Product evaluation form (holistic rubric) was used to collect quantitative data, and student drawings and worksheets were used to collect qualitative data. While a t-test was applied for the independent groups in the analysis of quantitative data, a content analysis was performed in the analysis of qualitative data. Based on the findings, the product evaluation averages of the experimental group in which the "love" theme was handled interdisciplinary were significantly different from the product evaluation averages of the control group in favour of the experimental group. Document analysis was applied to the drawings and worksheets of the experimental group students. As a result of the analysis, the themes were listed as values, nature, human, object, animal, living place, vehicle, from the most repeated to the least.

Keywords: Visual arts education, interdisciplinary teaching, love, primary school.

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[1] A summary of a part of this study was presented as an oral presentation in "The Ways of Expressing Love of Students in Visual Arts Lesson where Interdisciplinary Approach is Applied." III. International Art Education Research Symposium (6-8 December 2018), Ankara University Faculty of Educational Sciences, Ankara

INTRODUCTION

Interdisciplinary teaching, a frequent agenda item in art education, is not only an opinion and practice but also a program model and a way of teaching (Kırışoğlu, 2009, p. 42). "Efland (2002) proposes two models in the interdisciplinary approach to arts education. These are the *key work* and *key theme* models (cited by Kırışoğlu, 2009, p. 75)." In the key work model, a work of art is chosen to start the learning and this work of art acts as a bridge that makes the connection with the other fields of subjects. While the key theme model is applied along with a theme or a subject, science, social sciences, visual arts, or other disciplines of art and merged with the theme. At this point, the model itself is insignificant, but rather the more important thing is to be able to provide holistic teaching by ensuring the simultaneous use of a child's mental, sensual and psychomotor capacities (Kırışoğlu, 2009). Associating different disciplines with Visual Arts Class is considered to be important in the development of students, teachers, and educational environments. In this way, permanent learning can be achieved through the creation of more dynamic learning environments (Colbert, 1997; Delier, 2005; İşler, 2004). According to McMillen and Kennedy (2018), interdisciplinary teaching allows students to learn new materials and demonstrate what they have learned in more than one approach. In this way, learning can become more enjoyable, cheerful, and permanent and contribute positively to academic success. As stated by Lorimer (2009), the integration of arts education in the application of the interdisciplinary approach increases motivation in the classroom and creates a more cheerful teaching environment. Furthermore, *"learning through doing and experiencing"* increases academic achievement while also developing critical thinking. Thus, interdisciplinary arts education acts as a catalyst for personal, social, and academic development. According to Yarımca (2011), interdisciplinary teaching gives students the opportunity to create new ideas and synthesize the relationships between these ideas. Thanks to the application of interdisciplinary teaching in visual arts education, students' motivation and curiosity towards learning increase, and it is then possible to transfer their critical and creative thinking processes to other fields (Brezovnik, 2015). While a student experiences high-level thinking processes such as critical thinking, creative thinking, and relational thinking in the artistic production process, he\she can also experience this in mathematics, science, or the social science fields. However, this is a difficult process for both the educator and the student (Acar et al., 2018). As stated by Jensenius (2012), integrating other disciplines academically with different disciplines such as mathematics, science, the social sciences while conducting academic or scientific studies requires a more difficult process. One of the biggest factors in this is the differences in the nature, implementation, and evaluation process of art and art education. Integration or the interdisciplinary association of art refers to the effort to establish a series of relationships between learning in art and learning in other skills and courses. This effort often appeals to many educators and arts educators for different reasons. The integration of art with different disciplines makes sure that some studies are no longer based on theoretical research or philosophy by showing that it is a powerful way to learn and apply basic skills, knowledge, and attitudes (Deasy, 2002**).** "Studies indicate that arts provide additional learning paths that enable students to better understand the meanings of various subjects, including mathematics (Brezovnik, 2015, p. 16)." While art education includes the relationship between different branches of art, it also has an interdisciplinary structure that is connected with different disciplines. Sometimes it supports other disciplines, and sometimes it

is at the center as an executive. According to Deneme and Ada (2012), Doğan & Arıcı, (2019), Kanatlı & Çekici (2013) and Ünveren & Namlı Altıntaş, (2019). the interdisciplinary approach creates connections between completely different disciplines or fields such as mathematics, science, history, language, and art. Using this method, students develop a holistic perspective while associating school, classes, and life with each other. In addition, it helps students to think and learn effectively and to create their own thinking and learning styles (Klaassen, 2018). In addition to more than one academic discipline, integration methods and analytical frameworks are used in the application of interdisciplinary learning in the Visual Arts Class. Unlike multidisciplinary or cross-disciplinary teaching, it requires different perspectives to be merged or synthesized. (https://serc.carleton.edu/sp/library/ interdisciplinary/ how. Html). Making the students interested in the class, developing knowledge, insight, problem solving op-level thinking abilities, self-esteem, self-sufficiency, and the passion for learning are the common targets brought by teachers into the classroom as interdisciplinary teaching aims to contribute to these targets. While Kırışoğlu, (2009), Suraco, (2006) and Repko, (2009) believe that interdisciplinary teaching has a contributing effect on the improvement of cognitive abilities, Kavaloski (1979), Field et al. (1994), Newell (1990) and Vess (2009) conclude that interdisciplinary teaching offers several different educational advantages including the improvement of abilities, recognizing biases, critical thinking and the ability to tolerate uncertainty (https://serc.carleton.edu/sp/library/ interdisciplinary/ how. html).

Love

Regardless of age, geography, and culture, love has always been the factor that made humans what they are. Emotions are important in one's life and a life lacking in love is deficient in both social and individual terms. According to Bilim (2010), love is a concept used to express the closeness felt towards people, events, animals, location, plants, situations, or objects. While it is difficult to explain love from a psychological perspective, there is a lot that can be said about love. The concept of love, which has a multidimensional structure, differs according to the feelings and perspectives of individuals. "The language of love is not a phenomenon that is imprisoned within the limited patterns of any language, but rather it is a universal form of communication. Love is like an educator who always wants to elevate people and makes a special effort for this, beyond any conditioning, any thought (Benazus, 2002, p. 15)." According to Kayadibi (2002), the scope of love is wide and it is a difficult concept to understand. It constitutes the research subject of fields such as psychology, philosophy, literature, and medicine, and each field explains the concept of love according to its own nature. Love is the deepest and most rooted emotion among human emotions. Fromm (1996, p. 40) says, "It is one of the various aspects of the orientation that I call the producer: it is the active and creative commitment that man establishes with other people, himself and nature. …" He defines love with its deep and meaningful dimension. Human beings are in direct or indirect communication with all other living and non-living beings in nature through the social environment in which they live. Love is an important type of emotion in the formation and experience of this communication. Meeting the needs of love and attention that he/she encounters from the moment he/she is born constitutes the main factors in the formation of the concept of love in that individual (Bilim, 2010; Cüceloğlu, 1998). In recent years, it has been seen that more love-related research has been done in art, philosophy, and

other fields. In these studies, it is noteworthy that love is seen as an emotion that can be gained through education. As an emotion, it is seen that there are unlimited types of love with its multidimensional and comprehensive structure. The types of love can be listed as the love of people, love of God, love of science, love of country, love of parents, love of nature. The common point in the listed types of love is the act of loving itself (Benazus, 2002: Fromm, 2002; Özen & Gülaçtı, 2010). The most important condition for the development of the feeling of love in an individual is to share life with people who love life. A love of life is a feeling that cannot be taught from individual to individual through words, explanations, and advice about loving life. The development of a love of life in individuals shows itself in attitudes or behaviours rather than opinions and thoughts, and in the tone of voice rather than words. Rather than the individual and social rules and practices, love can be most observed in the energy, attitude, and behaviour of individuals (Fromm, 2000). Love is the strongest source of life that attaches a meaning to life and acts as the most basic requirement of man from his birth to his death. Being one of the most important elements for ensuring that human existence has meaningful integrity, love is comprehensive, and it is an indispensable basic phenomenon in human life (Akdoğan, 2001; Benazus, 2002; Rowshan, 2011). Love is seen in many different forms in human life, such as family love, companionship, love towards the opposite gender, life, nature, and animals. "Production, creation, and love of art can be added to the types of love. The main conditions of love are talent, artistic awareness, artistic ethics, and love… And one of the conditions of art is love (Akdoğan, 2001, p. 235)." According to Maslow, people want to love and be loved by making connections with other people within social life through love. They do not want to be present in an environment where they do not feel any love. To understand, to be understood, and to live in an environment that develops love are natural needs of humans (cited by Özen & Gülaçtı, 2010). A relationship filled with love (family, mutual relationship, friend etc.) is seen to be important for the psychological and biological health of individuals. However, is this importance the result of being loved or providing love or both? Some studies indicate that expressing emotion through writing helps an individual to develop that particular emotion (Wiseman, 2017, pp. 27-28). Nowadays, concepts related to love are becoming intertwined, and there are question marks in the minds of people about the exact meaning and definition of love Şahin et al., (2019). Although its place and importance in individual and social life has not been adequately researched, love as a feeling should take place in all areas of human life. It is also very important to conduct scientific studies on such an important and healthy feeling that gives meaning to human existence. Starting from their childhood years, individuals' perceptions of love shape their professional, moral, and social relations while determining what kind of individuals they will be in the future (Ergen, 2013; Kayadibi, 2002; Özen & Gülaçtı, 2010; Şahin et al., 2019). "Love is a value that should be embraced by everyone in all human relationships, enabling people to trust each other, develop their relationships, and thus enjoy life (Yıldız, 2011, p. 208)."

The Sense of Love in Children

A child first opens its eyes to the world within a home environment. The home environment is highly important as a physical and mental space where the foundations of the child's relationship with the world are laid. Once a child gets to know its environment by placing its home and the mental process resulting from family affairs,

he/she can be able to realize all their external communication and interaction through the home it was born into and grown-up in. Mental stimuli presented in the home environment in early childhood, through love and trust, form the basis for the child's multi-faceted development (Aydoğan, 2006). Some of the factors that affect the child's development process depend on being a participant and cannot be changed. The second factor is the environment that can be changed and regulated. Development experts emphasize that the child's personal development largely depends on the environment in which he lives and develops. In order for the child to grow, develop, get to know them self, realize their abilities and learn new concepts, the environment in which he\she lives must be well organized. Therefore, environmental characteristics, which can be restrictive in some cases, should be regulated in terms of the child's health and development (Aydoğan, 2006).

The process where an individual becomes knowledgeable and aware of the existence of an object or event is called cognition. This process involves all kinds of mental activities by a person towards getting to know, understanding, and learning his surroundings. According to the cognitive approach, learning is internal, and it cannot be observed directly. Unlike other beings, humans go through mental processes such as attention, perception, thinking, memory and that is how they understand and interpret their surroundings. During this interaction process, he\she both influences their surroundings and is influenced by them. This is an indication that cognitive processes shape human behaviour right from birth (Demirel, 2010). The communication and interaction established by children with their surroundings when they are 6- to 12-year-olds are important factors for them to develop a positive sense of self. Furthermore, learning about right and wrong and making spiritual choices reaches an important level in children during this period (between 6 and 11) and they start to nurture positive emotions towards themselves, others, and the world (Koluckiz & Lemish, 2011; Selçuk, 2007). Reinforcing the negative or deficient aspects of the child by other individuals, such as family and teachers, causes negative thoughts and feelings on these children. In this case, it causes the development of negative self-perception in children (Selçuk, 2007). Considering children, their childhood cultures, peer group interaction, and also their communication with adults; these processes can be thought of as collective emotional socializers. Children both experience awareness about their emotions and control their emotions through peer group interaction (Trevisan, 2005). Childhood is the most appropriate period for values education, which is closely related to people's emotions, thoughts, and behaviours (Yıldız, 2011). Considering that human life is a flood of emotions, it is a fact that love, happiness and sadness take place. A healthy developing child is a child who feels the emotions that their age group should feel and is aware of these emotions and can think about their feelings.

The "love" that a child has or could have towards the world they are in and towards all beings has constituted the subject of this study under the scope of interdisciplinary teaching. As McMillen and Kennedy (2018) stated, interdisciplinary teaching allows children to learn new materials and demonstrate what they have learned in more than one approach. Learning can become more enjoyable, fun, and permanent and contribute positively to academic success. On a similar note, Lorimer, (2009) states that integrating art education to the practice of interdisciplinary approach creates a more joyful teaching environment and adds that academic success achieved by *"learning through doing and experiencing"* improves critical thinking. The interdisciplinary approach

associates knowledge from school with real life, hence contributing to the holistic development of personality (Helmane & Briška, 2017; Özçelik, 2015; Özçelik & Semerci, 2016; Suraco, 2006). As Demir (2008) states, due to the developmental characteristics of this period, it is seen that children generally perceive and learn about entities and events as a whole. While development in children progresses as a whole in physical, mental, emotional, and social areas, the development of the child in one area is related to the development in other areas (Selçuk, 2014). Considering that fifth-grade students have a holistic perspective, it was thought that it would be beneficial to study the concept of love with an interdisciplinary approach. According to Kanatlı and Çekici (2013, p. 229): "Due to its nature, Turkish Class conforms to interdisciplinary studies and has a direct relation with several subjects and disciplines. Collaboration can be made with Drawing Class while improving writing and speaking skills. Improving the ability of thinking is also related to Turkish Class". This statement indicates the importance of improving the language skills of children in this age group. This study has analyzed the ways preferred by students to express the concept of love.

Mankind is in direct or indirect communication with the social environment he\she lives in and all other living and non-living beings in nature. Love constitutes an important communication channel and type of emotion for people to establish and maintain communication with their environment (Cüceloğlu, 1998). In today's world, where individual and social change is experienced very quickly and everything is consumed very quickly, the interpersonal importance of the feeling of love has become more remarkable. A number of studies (e.g., Akyol, 2012; Aydın & Çamur, 2018; Chapman, 2011; Önal et al., 2019; Özen & Gülaçtı, 2010; Reis & Aron, 2008; Şahin et al. ,2019; Trevisan, 2005; Wiseman, 2017) on adult individuals with different ages, genders, education levels and status have analysed the effects of different types of love (such as human, nature, opposite gender, animal) and concluded that love is an emotion that could be acquired through education. Studies on love and emotions seem to have multiplied since the early 80's. While the rise of new paradigms was observed in child sociology in this period, when the studies on the subjects of love and emotion are examined, it is noteworthy that it is difficult to find studies with children on these subjects. Love and emotional relationships still remain an adult topic (Trevisan 2005). Furthermore, studies conducted on adult individuals (e.g., Ergen, 2017; Chapman, 2011; Özen & Gülaçtı, 2010; Reis & Aron, 2008; Sahin et al., 2019; Wiseman, 2017) indicate that love is an emotion that can be developed through education. For these reasons, in this study, revealing the situation of primary school students on the subject constituted the starting point of the study.

Purpose

This study was carried out with the idea of making fifth grade students think about the concept of love and create an awareness. In this sense, answers to the following questions were sought:

Subproblems

1. Does the teaching of interdisciplinary visual arts with the theme of "love" in a 5th grade primary school have an effect on the drawings made by the students?

a) Is there any meaningful difference between the score averages of the experimental group (the group subjected to interdisciplinary visual arts teaching with the theme of "love") and control group (the group subjected to the Ministry's study book) students' drawings on love?

2. The meanings attributed to love in the paintings of the experimental group students, who were taught interdisciplinary visual arts with the theme of "love" in primary school 5th grade;

a) What are these?

b) Do they vary per gender?

3. The way of expressing the concept of "love" in different representations (tale, composition, and poetry) and the meanings attributed by the experimental group students subjected to interdisciplinary visual arts teaching;

a) What are these?

b) Do they vary per gender?

METHOD

The study was carried out as a mixed method research in which quantitative and qualitative research methods were applied together in order to answer the sub-problems created in line with the purpose of the research. In the literature review, it is seen that quantitative and qualitative data are brought together in different ways in the application of mixed methods. While quantitative methods come to the fore in some studies in which mixed methods are applied, qualitative methods can be used in some studies, and both methods can be used equally in some other studies (Toraman, 2021; Yıldırım & Şimşek, 2016). "Mixed methods research", which is among the concepts used in mixed method research, seems to be more inclusive. Mixed method research are studies in which quantitative and qualitative methods are applied together, data are collected, analysed and the findings are integrated, and interpretations are made (Yıldırım & Şimşek, 2016, p. 322)". Mixed method research can be defined as research that covers the research problem and uses qualitative and quantitative methods together for the purpose of multidimensional analysis (Büyüköztürk et al., 2010; Toraman, 2021; Yıldırım & Şimşek, 2016). In mixed method research: the two methods can be presented separately (without combining them) by studying the same subject or a different dimension of a subject with qualitative and quantitative data collection tools (Toraman, 2021). According to Yıldırım & Şimşek (2016) and Büyüköztürk et al., (2010), the qualitative and quantitative data obtained simultaneously can be analysed and reported separately, according to the way the data is analysed in the triangulation pattern within the mixed method. In this study, in line with the first sub-problem, the mean scores of the products created by the students in the experimental and control groups were presented by applying the quantitative technique independently of the qualitative data. The qualitative data (analysis of the drawing and the break down) obtained in the direction of the second and third sub-problems are presented independently of both each other and the quantitative data. While obtaining the data of the quantitative part of the study, a random design with a post-test control group was applied. Phenomenology pattern was used to obtain qualitative data. The quantitative dimension of the study is limited to the data obtained from the experimental and control groups, while the qualitative dimension of the study is limited to the data obtained from the products of the experimental group students only.

Study Group

The study group of the research consisted of a total of 52 students from a secondary school affiliated to the Ministry of National Education in Diyarbakır in the 2014-2015 academic year, 26 students from the 5-A Class in the experimental group and 26 from the 5-B Class in the control group. The school where the study was conducted is located in a small town, and the socio-economic levels of the students attending the school are at or slightly below the middle level. In the study, which was based on the principle of volunteerism, students whose age (10-11 years) and academic achievement levels were close to each other and who did not have significant differences between their success levels, constituted the study group. Before the application study, the students were interviewed by their classroom teachers from years and the similarities and differences between their success levels were determined. In addition, interviews were made with other course teachers and their grades were examined. Experiment and control group students, whose grades were compared on a yearly basis, were determined by exchanging ideas in line with the information of other course teachers. In the interviews, no significant differences were found between the success levels of the groups.
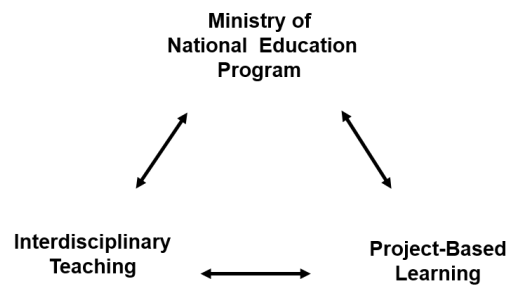
Project Implementation Process

The school attended by the study group students is located in Diyarbakır province, Turkey. The subjects/themes that require interdisciplinary works in the annual plans of all school's course works have been defined by the Ministry of National Education. The subjects of the courses associated in the study are also included in the daily plans of the ministry. Despite the fact that the education program includes interdisciplinary teaching, there is some flexibility in practise. The differences between the conditions lead to flexibility in the practicality of the plans in each school. In this sense, flexible practicing of the program has been taken into consideration for the creation and implementation of a teaching-learning environment in each stage for each region and geography. The application study was implemented in this direction and as planned by the researchers and course teachers within the scope of the ministry's program.

Creating and Implementing Project Plans in the Experimental Group

Students were provided with detailed information at the beginning of the application of this study. The relevant achievements from Visual Arts, Social Sciences and Turkish classes were associated with the theme of "love" and the activities for each class were planned and applied by the class teacher under the scope of that class. The project continued for four weeks for each class with a single class happening once (40 minutes) each week. The teachers of the three classes realized the teaching process within the same timeframe by coordinating and communicating with each other. Each stage of the four-week duration was planned in detail and the application steps of the project were realized. In this sense, the project was placed onto three main dimensions.

**Ministry of
National Education
Program**

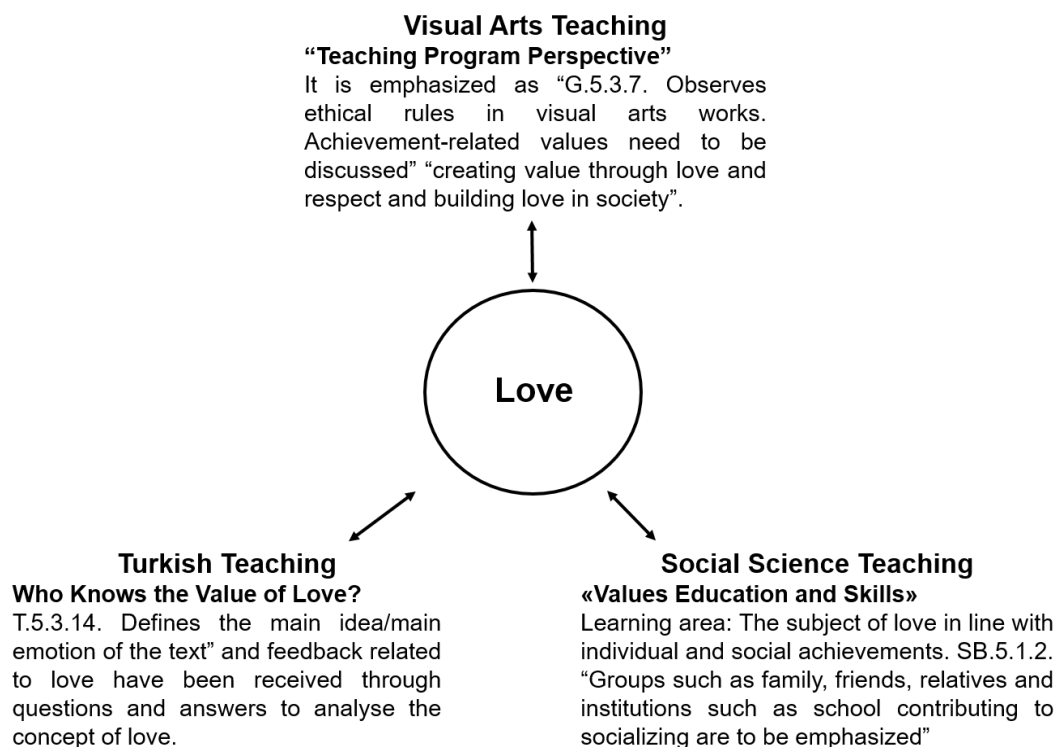**Interdisciplinary
Teaching**

**Project-Based
Learning**

Figure 1. Main Dimensions of the Study

Taking into account what Işık Tertemiz & Aslantaş (2018) expressed, the courses were interdisciplinary associated in the form of the "Integrated Model" as seen in Figure-2 within the scope of the theme. New samples have been planned for each of the disciplines by using their basic units. The knowledge, skills, and attitudes were given to the students through the interdisciplinary integration of the three courses. Within the scope of the "Love" theme, three different courses were implemented in the same time period with joint planning.

Love

**Visual
Arts
Teaching**

Love

**Turkish
Teaching**

Love

**Social
Science
Teaching**

Love
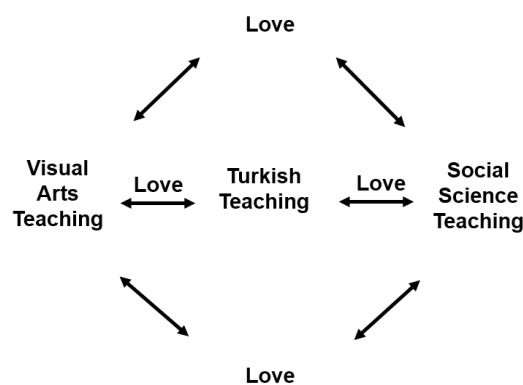
Figure 2. Associating Classes as an Interdisciplinary Integrated Model

A meeting took place with the Visual Arts teacher, Turkish teacher, and Social Studies teacher prior to their classes. It was decided to conduct the classes in line with the theme-related subjects and achievements included in the annual plans that contain interdisciplinary teaching. In this way, integrity was achieved in the implementation of the activities within the scope of the theme. Taking into account what Jensenius (2012) stated, interdisciplinary associations were made. The lessons were planned to be implemented in the same weeks and were taught in a coordinated manner by the teachers of the three lessons. Teachers shared information by communicating throughout the process and data was collected accordingly. In line with the decision taken, the relevant achievements of the classes have been associated as shown in Figure-3.

Visual Arts Teaching
"Teaching Program Perspective"
It is emphasized as "G.5.3.7. Observes ethical rules in visual arts works. Achievement-related values need to be discussed" "creating value through love and respect and building love in society".

Love

Turkish Teaching
Who Knows the Value of Love?
T.5.3.14. Defines the main idea/main emotion of the text" and feedback related to love have been received through questions and answers to analyse the concept of love.

Social Science Teaching
«Values Education and Skills»
Learning area: The subject of love in line with individual and social achievements. SB.5.1.2. "Groups such as family, friends, relatives and institutions such as school contributing to socializing are to be emphasized"

(Ministry of National Education, 2014-2015).

Figure 3. Associating the Achievements of the Subject

Social Studies Class: The subject of love was discussed in the Social Studies Class under the title of *"Values Education and Abilities"* and within the framework of *"Individual and Society"* achievements. The achievement number of this class is *"SB.5.1.2. Groups such as family, friends, relatives, and institutions such as school contributing to socializing are to be emphasized"*. In line with the concepts in the current outcome, the lesson was taught within the framework of the theme of love. In the Social Studies Lesson, the concept was examined within the framework of individual-society relationship under the name of values education and the ways that could be opened through love were tried to be discovered. At the beginning of the lesson, the teacher started a discussion about social events and asked the students to participate by expressing their opinions on the subject. In this sense, the theme of "love" was discussed. Ideas from the students about the theme were opened for discussion. In the continuation of the course, topics such as "social love", "love within the family" and "love between individuals" were determined. These topics were discussed, and conversation groups associated with the theme were formed. Speech groups expressed their opinions on the subject and expressed the place and importance of love in our lives. At the end of the lesson, the teacher also participated in the discussion and the topic was addressed in depth.

Turkish Class: The relation between the themes of love and goodness has been analysed in Turkish Class in line with the subject "Who Knows the Value of Goodness?" that is part of the annual plan. Awareness about love was created by highlighting the concept of love. Various texts related to love were studied under the achievement

name "T.5.3.14. *Defines the main idea/main emotion of the text*" and feedback related to love were received through questions and answers to analyse the concept of love. In Turkish Class, the concept of love progressed in line with verbal and textual content and verbal feedback was received.

Within the scope of a four-week lesson plan, the teacher informed the students about the subject at the beginning of the lesson. In line with this information, the students were motivated by the question-and-answer technique used. After this preparation, students were asked to give examples of idioms and proverbs related to the subject. After the examples were taken from the students they were discussed, and the subject was reinforced. After this stage, the students were asked various questions and then these questions were answered by the teacher. In relation to the Turkish Class, the theme of "love" was used in stories, tales, compositions, poems, etc. and students were asked to express their preferences in different ways. The course was terminated after the completed assignments were collected.

Visual Arts Class: The Visual Arts Class's annual plan includes *"G.5.3.7. Observes ethical rules in visual arts works. Achievement-related values need to be discussed"* under the title *"Teaching Program Perspective"*. The class was conducted by addressing the theme of love through achievements such as *"creating value through love and respect and building love in society"*. In Visual Arts Class, on the other hand, the concept of love, which cannot be put into words, were studied concentrating on how to reveal emotions through drawing and colours.

At the beginning of the lesson, the teacher made a statement on the subject of "*the importance of expression in art*". In the previous lessons, he showed examples of the pictorial expressions that the students made about the determined concepts. Explanations were made about the form of artistic expression, which provides the opportunity to concretize abstract concepts. In the continuation of the course, the theme to be embodied was defined as "love" and the students were asked to paint with free techniques and materials related to the theme of "love". While the students continued with the pictures, they were enabled to express the theme better with the question-answer method.

It was aimed to represent the theme in the strongest way by allowing the use of various written expressions in the content of the paintings. In the process of the interdisciplinary processing of the "love" theme, students were asked to express the concept of love with pictures and verbal representation. At the end of the lesson, the completed works were collected, and the lesson was concluded. In addition, at the end of the four-week course, students' thoughts on "love" were documented with a one-item opinion form.

Creating and Implementing Class Plan in Control Group: The Visual Arts Class was carried out as planned by the teacher within the scope of the school's education program with the Ministry of National Education. Classes on love were planned by the teacher as four-week programs, as included in the program. The same achievements were also included in the Social Studies and Turkish classes. In all three classes, the subject of love was discussed, and the achievements were ascertained and carried out as it was in the program.

Visual Arts Class "Teaching Program Perspective"

It was conducted through achievements such as "G.5.3.7. Observes ethical rules in visual arts works. Achievement-related values need to be discussed" "creating value through love and respect and building love in society".

First Class: The importance of love in human life has been emphasized following a love-related discussion. The students shared their feelings and thoughts on the subject of love and directed questions to their teacher. The students also discussed the subject of love among themselves for a while. Towards the end of the class, they went on to the stage of deciding what kind of painting they would do. They were asked to rethink the subject outside of school for a week and to research the subject of love through sources and the people around them.

Second Class: Students started their designs and created their drawings at the beginning of the class. Afterwards, they were asked to express their thoughts and feelings about love through their drawings and without any technical or thought limitations. Questions from students were answered during the class. At the end of the forty-minute class, the resulting products were collected to be completed in the next class.

Third Class: The students, having had discussions about their assignment, continued with the drawings they started in the second class. In addition, they asked the teacher questions about the subject and their assignments. The course continued in the form of mutually sharing ideas and question-answer. Some students having completed their first assignments, moved on to their second assignments. Furthermore, the students continued to learn about coloured pencils, watercolours and other techniques they applied in this course.

Fourth Class: Those continuing assignments from the third class completed them. The missing parts of the students' assignments were then finalized. Most of the students made more than one painting. All the completed assignments were collected at the end of the class and the class was completed.

Data Collection Tools

Quantitative Data Collection Tool

Visual Arts Class Product Evaluation Form (Result "Holistic Rubric"): In order to answer the first sub-problem of the research, a product evaluation form (holistic rubric) was used as a quantitative data collection tool. In line with the purpose of the study, a product evaluation form was used to determine whether there was a significant difference between the product score averages of the experimental and control group students. The form was developed by Aslantaş in her doctoral thesis in 2012 to evaluate the products of fourth and fifth grade students in the Visual Arts Lesson. The form consists of seven items and five dimensions, and the lowest possible score is seven and the highest score is thirty-five. Expert opinions from different fields were taken in the preparation and finalization of the items. Opinions of one expert on scale development and evaluation language and three experts on statistical analysis were taken. The form was finalized by taking the opinions of three faculty members from the Department of Fine Arts Education, Department of Painting Education. It is important to evaluate the student

product within a certain well-defined understanding. Such an assessment may be possible by producing appropriate rubric scoring guidelines (Atılgan et al. 2009; Kan, 2009). Scoring guidelines are generally created in two types: outcome (holistic) and process (analytical). The result (holistic) scoring directive aims to evaluate student work as a whole. For this reason, holistic rubric focuses on the product, its qualities and the result, not on the product's formation process (Atılgan et al., 2009, p. 282). "In the development of the form, the type of scoring directive was determined and written in a clear and understandable language, taking into account the points stated by Kutlu et al, 2009 and Kan, 2009. The consistency of the items in the directive was cross checked with the opinions of experts from different fields. The criteria in the directive and the features that should be found in the product are clearly stated. The scoring system and the difference in score levels were determined in a meaningful and understandable way. The expression of the criteria is clear and understandable and has been created in a way that does not allow bias in accordance with the level of student products (Aslantaş, 2012, p. 68)".

Qualitative Data Collection Tools:

Within the scope of the study, drawings and worksheets (poem, composition, fairy tale) created by the experimental group students to answer the second and third sub-problems were used as data collection tools to apply document analysis. There are three types of data collection methods most commonly used in qualitative research: Interview (including focus group interview) is in the form of observation and examination or analysis of documents (images, videos, photographs, drawings, etc.). Analysis of documents can be used as a stand-alone data collection tool in qualitative research (Büyüköztürk et al., 2010; Yıldırım & Şimşek, 2016).

Student Drawings: In order to answer the second sub-problem (Items a and b) of the research, student drawings were used as a qualitative data collection tool. In qualitative research methods, visual materials such as films, videos and photographs can be used together with written sources. While such materials can be a data collection tool for research alone, in most cases they can be used together with data collection methods such as observation, interview or document review. In such a case, qualitative research based on multiple data can significantly increase the reliability (Demir, 2005; Creswell, 2005; Yıldırım & Şimşek, 2016). Drawings or visual drawings, which are used as data collection tools in order to examine and determine the meanings they attribute to the concept of love, are a widely used as a method to determine the emotions and thoughts of children (Halmatov, 2015; Okyay, 2008: Paktuna Keskin, 2007). Children of different age groups and educational levels symbolically reflect their feelings and thoughts on the drawings they draw. The nature of the lines in the picture and the content of the picture reveals the child himself, the people in their immediate surroundings and their perceptions about them (Halmatov, 2015; Paktuna Keskin, 2007; Sayıl, 2004; Yavuzer, 2019).

Work Sheets: In order to answer the third sub-problem (Items a and b) of the research, worksheets (composition, poem and fairy tale) were used as a means of collecting qualitative data. Content analysis technique was applied to the obtained data. Document analysis includes the analysis of written materials containing information about the case or cases that are aimed to be investigated. Which documents are important and can be used as a data

source is closely related to the research problem (Büyüköztürk et al., 2010; Tertemiz Işık & Karabatan 2019; Yıldırım & Şimşek, 2016, p. 89).

Data Analysis

Quantitative Data Analysis: In order to answer the first question of the research; the drawings created by the experimental and control group students with coloured pencils on 35x50 cm drawing papers were evaluated independently by three different visual arts teachers at different places and times. The images of the experimental and control group students' drawings were sent to the teachers in the form of files via e-mail along with the opinion form. Scores from three different teachers were collected for each student, and the average of the scores was calculated to obtain the score for each student's drawing. The t-test was applied on the mean scores of the experimental and control group students' products.

Qualitative Data Analysis: In order to find answers to the second and third sub-problems of the research, content analysis was applied to the drawings and worksheets of the experimental group students. Themes and codes were determined from the data obtained. The themes were presented in tables according to their repetition frequency. As stated by Yıldırım & Şimşek (2016) and Büyüköztürk et al., (2010), the qualitative and quantitative data obtained simultaneously can be analysed and reported separately, according to the way the data is analysed in the variational pattern in the mixed research method. In this study, the mean scores of the products created by the students in the experimental and control groups in line with the first sub-problem were presented by applying the quantitative technique independently of the qualitative data. The qualitative data (analysis of the drawing and the transcript) obtained in the direction of the second and third sub-problems were presented independently of both each other and the quantitative data. Data collected in qualitative studies vary. It can be in the form of observation notes, interview recordings, documents, drawings and other graphic presentations (such as drawings, tables). This means diversity, creativity and flexibility in the analysis of data. Three basic concepts are important in data analysis in qualitative research. These are "*description, analysis and interpretation*". (Büyüköztürk et al. 2010; Gökçe; 2006; Yıldırım & Şimşek, 2016, p. 237-238).

Coding the data: Researchers have examined student drawings and written documents in depth several times. Sections, sentences and all kinds of written and visual expressions that can make sense for the research have been determined. In line with these determined expressions, the codes were reached by taking into account other similar and related data in the documents and drawings. Coding the data constituted one of the longest processes of the research. Every sentence, every picture has been studied, read, and revised many times. By comparing the codes, they determined, both researchers reached the themes by identifying common and related codes. At the end of a long process, the codes to find the answer to the second and third sub-problems were clarified. Within the scope of the research, *coding was done according to the concepts extracted from the data with an inductive approach*, taking into account the academic level of the study group. Especially when the analysis of written documents (composition, poetry and fairy tales) was started, it was seen that the data in terms of written expression and language expression were not clear and understandable. For these reasons, the

examination and analysis process of written documents required a longer period of time compared to other data. There have been moments when a data was read several times, sometimes many times, and opinions were taken. The fact that one of the researchers has been a visual arts teacher for these students for several years is something that reflects positively on the analysis process. Although some data obtained within the scope of the research are available, they were excluded from coding because they would not contribute to the research. Although some data obtained within the scope of the research were available, they were excluded from coding because they will not contribute to the research. The determined codes are *respect, trust, sharing, universality, happiness, human love, family, mother, father, sibling, grandmother, grandfather, friend, teacher, tree, bird, butterfly, sun, flower, cloud, house, school, car, kite, balloons, clothes* and *planes*.

Determining the Themes: General themes were determined in line with the codes obtained from the concepts. At this stage, the themes were taken into consideration by considering all the dimensions of the research. In line with the determined codes, seven themes were created in the form of *values, people, nature, living spaces, vehicles, daily use objects*.

FINDINGS

The findings of the study have been presented under different sub-problems.

Comparing the drawings made by the experimental and control group students on the theme of "love":

The first sub-problem of the study is "With regards to the points scored in expressing love, are there any meaningful differences between the drawings of the experimental group (the group who received interdisciplinary teaching) and control group (the group who received Ministry of National Education teaching program) students?". The findings acquired through the "Product Evaluation Form (rubric)" are given in Table 1, Table 2, and Table 3.

Product Assessment in Experimental and Control Group

Table 1. Descriptive Data Related to the Performance Criteria of the Experimental Group

	N	X	S
Item 1	26	4,54	,39
Item 2	26	4,61	,38
Item 3	26	4,02	,67
Item 4	26	3,99	,71
Item 5	26	3,81	,64
Item 6	26	4,03	,62
Item 7	26	4,36	,55

Table 2. Descriptive Data Related to the Performance Criteria of Control Group

	N	$\bar{X}$	S
Item 1	26	3,32	,46
Item 2	26	3,44	,42
Item 3	26	2,84	,56
Item 4	26	2,89	,56
Item 5	26	2,67	,59
Item 6	26	2,81	,52
Item 7	26	3,50	,49

Table 3. Results of t-test Held to Determine the Difference of Students' Product Assessment Scores Per Group (Experimental-Control) Variable

Group	N	X	S	sd	t	P	*
Experiment	26	4,20	,49	50	9,078	,000	
Control	26	3,07	,40				

*p< .05

According to the results of the t-test in Table-3, the performance evaluation scores of the students yielded a significant difference according to the group (experiment-control) variable [t(50)= 9,078; P< ,05]. While the average product evaluation score of the experimental group students regarding the drawing they made was X = 4.20, the average product evaluation score of the control group students was X = 3.07. The numerical difference between them was found to be significant in favour of the experimental group. This finding can be interpreted such that the scores related to the experimental group products, where the "love" theme had been applied through an interdisciplinary approach were more effective than the teaching method applied to the control group where the same subject has been taught.

The Meanings Attributed by Primary School 5th Grade Students in Interdisciplinary Visual Arts Teaching with the Theme of "Love"

Clause 'A' of the second question to be answered in the study is "What are the meanings attributed by the primary school 5th grade experimental group students in their drawings in the interdisciplinary visual arts teaching with the theme of "love"?". The findings regarding the meanings attributed to the concept of love by the experimental group of students for this question are presented in Table 4.

Table 4. The Frequencies of Themes Showing the Meanings Attributed to the Concept of "Love" by the Experimental Group Students in Their Drawings

Theme	*Code*	*ƒ (Theme)*
Nature	Tree, Flower, Cloud, Sun	79
Values	Respect, Trust, Sharing, Universality,	28
Human	Family (mother, father, sibling, grandmother)	27
Objects	Flag, Balloon, Kite, Cloth, Accessories	29
Animal	Bird, Butterfly	15
Living Spaces	Home, School	12
Vehicles	Vehicle, Airplane, Ship	5
Total		**195**

Each of the visual representations of love in the drawings created by the experimental group students were determined separately for each student, and codes and themes were determined during the analysis process. Experimental group students expressed love (f=79), values (f=28), human (f=27), objects (f=29), animals (f=15), living spaces (f=12) and vehicles (f=5). 31 codes listed above and seven themes (f=105) from these codes were determined in 26 drawings created by the experimental group students. It is noteworthy that MS-09 depicts his bond with his friend, who is also a boy, in the same clothes. FS-11, on the other hand, includes living and non-living things in her life, such as a bird and a house, which express love for her, while including herself, parents and grandmothers in her painting. Another point that draws attention in the drawings of the experimental group students is that they use warm and bright colours while expressing the concept of love and associate the concept of love with different objects, nature and spaces.

Comparing the meanings attributed by the experimental group male and female students to the concept of "love" in their drawings

Clause 'B' of the second question to be answered in the study is "Are there any differences between the genders in terms of the meanings attributed to love in the drawings made by the primary school 5th grade experimental group of students subjected to interdisciplinary visual arts education with the theme of "love"?". The acquired findings are given in Table 5.

Table 5. Themes and Frequencies of Experimental Group Girls and Boys Showing the Meanings Attributed to the Concept of "Love" in their Drawings

Girls		Boys	
Theme	*f (Theme)*	*Theme*	*f (Theme)*
Nature	40	Nature	39
Values	18	Values	10
Human	13	Human	14
Objects	22	Objects	7
Animal	12	Animal	3
Living Spaces	6	Living Spaces	6
Vehicles	0	Vehicles	5
Total	**111**	**Total**	**84**

When the visual representations expressing love in the drawings of the experimental group students are examined, it is seen that the vehicle (f=5) theme is included in the drawings of the male students, unlike the female students. As it can be seen in Table-5, there is a harmony between the themes in male and female students, and it is noteworthy that there are differences in the frequencies of the themes. While the objects are (f=22) for female students, it is (f=7) for male students. Considering the age level of the students (10-11 years), it is thought that girls may be more sensitive to colourful objects around them. This brings up the developmental characteristics, environmental and cultural factors in which children are brought up. Similarly, while it is vehicles (f=5) in male students, it is noteworthy that it is (f=0) in female students. Again, the fact that male students are around the age of 10-11 makes us think about their developmental characteristics, environmental-cultural

factors and learned behaviours. In addition, when the drawings are examined, female students mostly draw colourful pictures, women in loosely decorated clothes and accessories, while male students show a wide distribution and paint different objects from pictures of cars to airplanes and kites. This may be related to the linear and artistic development of this age group (9-12-year-olds), as well as due to factors such as individual preferences, environment growing up in, personality structure, and may also be due to gender differences. When the findings obtained from the visual representations in the drawings of female and male students were examined, it was seen that the concept of love is associated with humans, nature, animate and inanimate beings (such as animals, sun, clouds, trees, flowers) in nature.
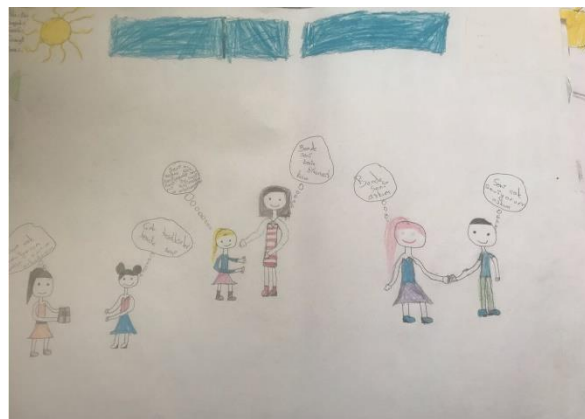

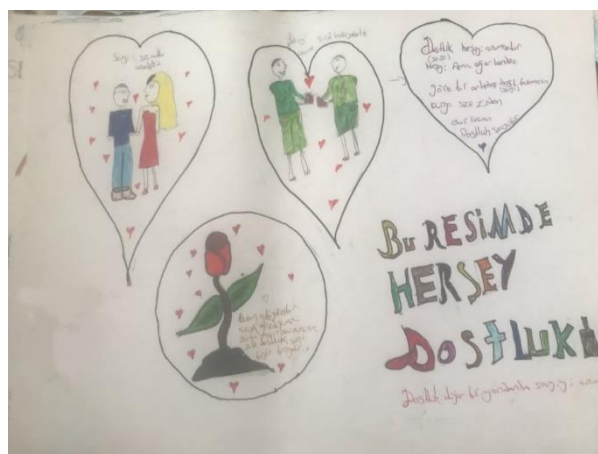**Figure 4.** S:1. 35x50 cm Picture on Drawing Paper

Figure 5. S:1. 35x50 cm Picture on Drawing Paper

Figure 6. S: 2. 35x50 cm Picture on Drawing Paper

Figure 7. S: 2. 35x50 cm Picture on Drawing Paper

Figure 8. S: 3. 35x50 cm Picture on Drawing Paper

The Expression Styles and the Meanings Attributed to the Concept of "Love" by the Experimental Group of Students

Clause 'A' of the third question to be answered in the study is "How do the experimental group of students, in which interdisciplinary visual arts teaching with the theme of "love" is taught in the 5th grade of primary education, express the concept of "love" in different representations (tale, composition, story, poem) and what are the meanings they attribute?" The meanings attributed to the concept of "love" in different representations by the "experimental group students" are presented in Table 6.

Table 6. The Expression Types and Frequencies in the "Love" Assignment Papers of Experimental Group Students

Type of Expression	Boys	Girls	Total ƒ
Essay	8	0	8
Tale	1	4	5
Poetry	4	9	13
Total	13	13	26

When the worksheets were examined, as seen in Table-6, it is clear that girls expressed the concept of love with poetry (f:9) and fairy tale (f:4) while boys expressed love through the essay (f:8), tale (f:1), and poetry (f: 4). In the analysis of the assignment papers, it is noteworthy that male students focused on composition and female students focused on poetry. In addition, it was observed that female students did not write any essays and concentrated rather on poetry and fairy tales, while male students were divided between essays, poems and fairy tales, although the numbers varied. It can be thought that the forms of expression may be related to the socio-cultural environments, individual preferences, and personality structures of the children, as well as due to gender differences.

The meanings attributed to the concept of "love" by 5th grade students in different forms (tale, poetry, essay etc.) are given in Table-7.

Table 7. Themes and Frequencies Showing the Meanings Attributed to the Concept of "Love" in the Worksheets of the Experimental Group Students

Theme	*f*
Values	89
Human	11
Objects	3
Living Spaces	2
Nature	0
Animal	0
Vehicles	0
Total	**105**

The worksheets (composition, poem, fairy tale) of the experimental group students were examined. According to this analysis, while the themes used to express love are values (f=89), people (f=11), objects (f=3), living spaces (f=2), a common frequency value has not been established for nature, animal and vehicle codes. Seven codes (f=105) were determined in the 26 worksheets created by the experimental group students. When the codes and themes are examined, it is remarkable that all of the students associate love with socially accepted positive personality traits and values.

Poem by MS-6, titled *"Importance of Love"*:

The importance of love keeps a family together,

Because love is a good and important thing,

Love gives a good feeling,

For example, he is very happy when he sends a rose to someone,

They begin to trust each other and bond.

In his composition titled "Love" on the worksheet, student MS-4 said: "*I love my mother, father, brother, friends, teachers,* and *school. I learn respect, compassion, and love from my parents. I must set an example for my brothers and sisters. I love to play games with my friends. My teachers also teach me the lesson. When at home, I ask my parents what I don't know. My mom and dad do whatever I want. In short, love is a beautiful thing*." Student MS-13, on the other hand, associates love with respect in the working paper of his essay titled "*The Matter of Love and Respect"* and says *"We need to be respectful to each other, to the good and bad people. And to our friends too…"*

Figure 9. *S:1. Study Paper – Composition*   **Figure 10.** *S:2. Study Paper – Poem*

Figure 11. *S:3. Study Paper – Composition*   **Figure 12.** *S:4. Study Paper – Poem*

Figure 13. *S:5. Study Paper – Tale*

The Meanings Attached to the Concept of "Love" by Female and Male Students of the Experimental Group

Clause 'B' of the third question to be answered in the study is "Does the way of expressing the concept of "love" in different representations (tale, composition and poem) of the experimental group students, in which interdisciplinary visual arts teaching with the theme of "love" was conducted in the 5th grade of primary education, differ according to gender?" The acquired findings are provided, comparatively, in Table 8.

Table 8. Themes and Frequencies Showing the Meanings Attributable to the Concept of "Love" in the Worksheets of the Experimental Group Girls and Boys

Girls Theme	*ƒ*	*Boys Theme*	*ƒ*
Nature	0	Nature	0
Values	45	Values	44
Human	3	Human	8
Objects	0	Objects	3
Animal	0	Animal	0
Living Spaces	0	Living Spaces	2
Vehicles	0	Vehicles	0
Total	**48**	**Total**	**57**

When the verbal representations expressing love in the worksheets of the experimental group students are examined, it is seen that the male students have the themes of objects (f=3) and living spaces (f=2), unlike female students. This suggests that these differences may be related to personality, gender, socio-cultural structure and family environment. Furthermore, as seen in Table-8, there is a harmony between the themes and differences in the frequencies of the themes in male and female students. In girls, *values* code was (f=45) and in boys it was (f=44); in girls *human* code was (f=3) and in boys it was (f=8). In her poem, FS-2 says, *"If we are respectful to the elders …"*. FS-6's essay goes: *"I have learned what love means from the book you read. A loving person tolerates, respects, and gives happiness. Example: I show a lot of love to my friend, he understands my love from my eyes. Love and respect make life easier too"*. FS-9's essay goes: *"I think the foundation of love is trust. Because if I trust a person, I love that person. And it's the respect the person I love has for me. Love is like bonding with the other person, and for me, the other person has to love me too. Even if that person does not love me, I respect that person and continue to love that person".* MS-10 *"When I think of love, the first thing that comes to my mind is happiness and joy. Smile, my loved ones. Rejoice, joy in life, my friends. My dreams, my life";* FS-9's poem: *"…… Happiness, joy, respect, joy these are love ……"*. FS-12; *"… what you feel towards someone. …"*, FS-13; *"Love means that everyone loves each other. Love is an addiction. It is very important. If all people show love to each other, the world will be beautiful"*. FS-7; *"When I think of love, the following comes to mind… friendship comes to mind. In short, we call it love. We know that it is not easily obtained"*. As seen in Table-8, it was seen that male and female students associated with positive personality traits and values along with the human code in the representation of love. It can be said that a result close to each other is obtained when the gender dimension is examined.

CONCLUSION and DISCUSSION

The interpretation of the results obtained from the study examining the effects of expressing the concept of "love" with different representations (drawing and verbal) of an interdisciplinary visual arts education in a primary school 5th grade are as follows. The average score obtained from the drawings made on the theme of "love" by the experimental group students, in which an interdisciplinary approach was applied, was significantly higher than the mean scores of the control group students who were subjected to the Ministry of National Education's program. In other words, handling the theme of "love" with an interdisciplinary approach significantly affected the products made by the students. It can be said that the scores obtained for the products in the experimental group are more effective than the teaching given to the control group with the same theme. The fact that there was a significant difference in favour of the experimental group in which the interdisciplinary approach was applied in the evaluation of student products supports the ideas of McMillen & Kennedy (2018). McMillen & Kennedy (2018) state that the interdisciplinary approach allows students to learn new materials and express what they have learned in more than one approach. In addition, the way students express the concept of "love" was reviewed not only in their drawings but also in their verbal representation (fairy tale, poem, essay) in this study. It is believed that handling the class in a holistic way and including the verbal representations, along with the drawings, has had an impact on the products of the students. Supporting this view, Lorimer (2009) and Brezovnik (2015) state that the application of the interdisciplinary approach in visual arts education increases motivation in the classroom and creates a more joyful teaching environment. The assessment results of the products in the current study support the view that interdisciplinary teaching in visual arts education, which is stated in the study of Yarımca (2011), gives students the opportunity to create new ideas in the process of moving pictorial expression to verbal expression. The results achieved regarding the process and products can be deemed to be an indicator, as Deasy (2002) previously stated, of the effort to establish some relations between learning in art and learning in other skills and lessons by associating visual arts education with other courses in an interdisciplinary manner.

When the drawings made by the experimental and control groups of students are examined in terms of design elements and principles, visual representations that support the qualitative results of the research draw attention. In support of Paktuna Keskin (2007) and Yavuzer (2019), concepts such as love, friendship, family, siblings, friends, family elders, animals and nature, which are important for children, were seen in these drawings. According to Aktuna Keskin (2007) and Yavuzer (2019), individuals are born and grow up in a social and cultural environment that surrounds them. This environment allows them to form their personalities. In this context, in order to understand and describe a person, it is necessary to understand the social and cultural environment that surrounds him. The environment in which an individual is born into and raised in is reflected in many different skills, abilities, the formation and development of these abilities, as well as their linear-artistic development. This shows that the linear and artistic development of the child is affected by the environmental factors in which they grew up, as well as innate ability. When we look at the representations of love in the drawings of the experimental and control group students, the results support this idea. The results of the study

conducted by Tozduman et al., (2016) support these results that children reflect their family and loved ones and especially their friends in their drawings.

An analysis of these findings along with the visual representations of the experimental group students on the theme of "love" indicate that female students mostly had butterfly, on their drawings while male students preferred car, airplane, ship, school, flag and kite. In the visual representations seen in the drawings made by the experimental group students; it is noteworthy that female students mostly drew colourful pictures, women in fancy clothes and accessories, while it was seen that male students created a different distribution from cars to airplanes and kites and official buildings such as schools. These results may suggest that it may be related to the linear and artistic development of students (9-12-year-olds), as well as to factors such as gender differences, growth environment, personality structure. When the findings obtained from the visual representations in the pictures of male and female students are examined, it is seen that the students' concept of love is associated with human (friends, family, people in close surroundings, etc.), nature and living and non-living things (animal, sun, cloud, tree, flower) in nature. These findings support those reported by Tozduman et al., (2016); Halmatov (2015) and Yavuzer (2019), who analysed the linear development of this age group (9-12). It is seen that girls draw flowers, birds, balloons, hearts, clothes with details and more colourful and fancy accessories. On the other hand, it is seen that male students mostly draw nature with family members, parks, indoor spaces, school, as well as different tools, cars, planes, flags, cats, dogs, birds. Again, the effects of the place of residence, culture and social life are also seen in student drawings. It has also been observed that they have drawn certain figures within the framework of the events they have experienced or witnessed. As reported by Malchiodi (2005), it is seen that children are affected by the sociocultural structure in which they were born and raised in as well as in other areas of their lives in their drawings. The noteworthy thing during the product assessment stage of the study was the fact that some of the students expressed the concept of love through the nuclear family in their drawings while other students included the elder family members along with the nuclear family. It is also seen that along with some other family members, they include nature, the animals and flowers they love as a representation of love in their drawings. In a manner supporting the ideas of Halmatov (2015), students taking part in this current study reflected their experiences and perceptions of the outside world into their work in both papers and drawings.

Following the review of the verbal representations and drawings of the experimental group of students' concepts of "love", it has been observed that female students expressed it with poetry and fairy tales, while male students mostly preferred to express it through essays, poems, and fairy tales. The effectiveness of the gender factor was not taken into consideration in verbal representations. However, noteworthy that gender is effective in visual representations, what matters is the meaning that children attribute to the concept of "love" in these representations (fairy tales, essays, and poems, etc.). At the end of the experimental study conducted by Floyd and his team, in which the act of "writing about love" was examined, it was revealed that writing about love leads to an increase in individuals' happiness, a decrease in their stress and a significant decrease in cholesterol levels. It has been scientifically proven that having a positive approach towards life, expressing satisfaction, and writing

about love have a positive impact on human health (Wiseman, 2017, p. 27-28)." The results obtained by Floyd and his team may make us think that the verbal expressions of the students in the present study reflect positively on them regarding the concept of love. Wiseman (2017) points out that according to some studies, individuals expressing emotion by writing have positive reflections on the development of that emotion. Şahin et al., (2019) stated in their study that the prospective teachers were satisfied with their teaching of the "Love Education" course and that the course gave pre-service teachers different perspectives. For this purpose, they suggest that starting from preschool "Love" should be included in the program and continue up to the undergraduate and associate degree levels as an elective course, in order to establish a true understanding of love in students, and they point out the importance of love education in raising teachers. A study conducted by Kayadibi (2002) also emphasizes the significance of love education in the life of an individual and society. Another study conducted by Şahin et al., (2019) supports these recommendations and emphasizes that love education should be handled in a multidimensional way within the curriculum of the Ministry of National Education from primary school. This can be within the scope of a course, or it can be included in the course schedule.

In the work papers of the experimental group students, the theme of "love" was expressed in writing from the most preferred to the lowest in the following order: friendship, valuable, family, respect, happiness, trust, and sharing, connected with intelligence, imagination and universal. The reason why the concepts of friendship and being valuable come to the foremost is the importance of friendship in these age groups and it is also noteworthy that love is valuable or integrated with the concept of value. Some students have further expressed that *love is a deep and valuable emotion, it makes life better, and they cannot think of a life devoid of love*. With regards to expressing the concept of love, it was observed that students focused on concepts such as friendship, valuable, family, respect, happiness and trust and sharing. The results obtained in this study support those obtained by the study conducted by Tozduman et al., (2016). These results are a positive indicator in terms of the values through education to be given to the child desired.

When the expressions of female and male students on the theme of "love" and the meanings that experimental group students attribute in their verbal representations are examined, it has been observed that male and female students expressed eleven common concepts (friendship, valuable, happiness, respect, trust, communication, family, sharing, connected with intelligence, dreams and universal) on a total of ninety-two different occasions. Unlike female students, male students expressed it as *drawing, school, and games.*

RECOMMENDATIONS

Considering that the feeling of love, which makes life more beautiful and the world more liveable, is a feeling that can be created and developed in children through education, it can be seen that it should be included as a subject in the education program. The education of children who go through a personality development process at these ages is important because they need to create societies consisting of healthy individuals. The importance of love in human structure and life is a less explored topic and therefore should be studied more in science, art, education, and other areas of life. Regardless of age, era and, geography, considering that human beings are

emotional beings, when it comes to love for children, the importance becomes even greater. For this reason, love, which gives meaning to human existence and constitutes the essence of human creation, with its multidimensional interdisciplinary structure, should be the subject of diverse interdisciplinary research in all areas of life and in all kinds of activities, especially education, art, and science. Interdisciplinary studies can be applied at different grade levels and with different themes within an education program. It is thought that such studies can contribute positively to the development of students in different aspects. Love education should be handled in a multidimensional way within the curriculum of the Ministry of National Education from primary school. This can be within the scope of a course, or it can be included in the course schedule. This situation is important for the formation and continuity of a healthy, happy and productive society.

ETHICAL TEXT

In this article, journal writing rules, publication principles, research and publication ethics rules, journal ethics rules have been followed. Responsibility for any violations that may arise regarding the article belongs to the authors.

The application study of the article and the collection of data were carried out in the 2014-2015 academic year. **Authors Contribution Rate:** The authors have declared no conflict of interest. The first author's contribution rate to the article is 75%. The second author's contribution rate to the article is 25%.

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What is interdisciplinary Teaching? Erişim Tarihi: 20 Kasım 2021