



A Metaphorical Approach Regarding the Equipment of Students with Abstract Concepts and Values Included in the Citizenship and Democracy Education Curriculum *

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Abstract

This study attempted to investigate the effects of metaphor-based teaching activities on equipping students with abstract concepts and values, such as “rights, freedom, tolerance, responsibility, equality, honor, solidarity, love, fairness, reconciliation, peace, and patriotism, all of which are included in the themes “Our Rights and Freedoms” and “Our Duties and Responsibilities” of the 8th Grade Citizenship and Democracy Education Curriculum. The study was conducted in the eighth grade students attending a secondary school located in the city center of Konya, in 2012-2013 academic year. This study was designed based on the Mixed Methods Research and consists and consist two stages. The first stage of the study was designed according to the experimental design. To this end, two groups, namely an experimental group and a control group, were formed. The experimental group included 38 students whereas the control group consisted of 36 students. “Concept Test” was used to collect data. The second stage of the study, on the other hand, was designed based on the case study design and the focus group interview was used to collect data. Interviews were held with 36 students in the experimental group. The content analysis technique was used to reach the concepts and correlations that would account for the data that were collected. As a result of the study (according to the quantitative and qualitative research findings), it was observed that metaphor-based teaching activities were effective in the teaching of abstract concepts and values.

Keywords

Citizenship and democracy education
Constructivist approach
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Introduction

Developments in information technologies have shown that information is not a static but rather a changeable and improvable phenomenon (Bölükoğlu, 2002; Özgen, Narlı, & Alkan, 2013). These developments have naturally influenced the education environment and radical changes have occurred in education. Indeed, the behaviorist theory, which reflected the traditional educational approach, gave way to contemporary approaches as a result of developments that took place in education (Kuhn, 2003 as cited in Gülpınar, 2005).

The behaviorist theory ignored the internal processes (mental processes), which are very important for behaviors to appear, by reducing behavior to the correlation between stimulus and response (S-R) (Woolfolk, 2005 as cited in Gültekin, Karadağ, & Yılmaz, 2007; Özkılıç, 2011; Açıkgöz, 2003). Reflections of this approach in education are clearly seen in teacher and student roles (Özkılıç, 2011). In this approach, where the teacher is at the center of education and teaching and has the roles of conveying invariable information and ensuring discipline in the classroom, while the student is in a passive role, where he is not responsible for learning, but just receives information and does not make an effort to learn. The approach that is commonly used in such an environment is called “expository teaching”. In this approach, where a lot of information is conveyed in a short time, generalizations and concepts are given by the teacher beforehand and the deductive method is used (Nas, 2006; Senemoğlu, 2012), and students can only be “passive participants” (Özşahin, 2008).

Today, there is a need for individuals who are not only equipped with certain knowledge and skills but also think, construct knowledge, and possess problem solving skills. As a result of this need, the constructivist approach emerged as one of the prominent concepts in education towards the end of the 20th century because teachers had to try different teaching approaches other than direct teaching to meet this need (Saban, 2013) and because educators encountered problems in education based on the behaviorist theory (Arslan, 2007).

The constructivist approach is an information theory based on learning (Fosnot, 2007). This approach argues that by virtue of its very nature, knowledge should not be conveyed to the individual as it is but instead it should be constructed by the individual (Saban, 2013). Glasersfeld (1997 as cited in Senemoğlu, 2012, p. 52) bases the constructivist approach on two fundamental principles: (i) *Knowledge cannot be received passively; it is constructed by the cognizing organism (the individual)*, (ii) *Cognition serves adaptation and organization of the experiential world, not the discovery of the metaphysical truth*.

In the constructivist approach, the teacher assumes a role where he urges students to investigate and ask questions, involves students in the process and encourages active participation, guides learning, enables students to gain experience by confronting them with real life problems and giving students time to establish connection between concepts (Valiandes & Tarman, 2011). In a situation where this approach is employed, students assume responsibility for learning, questions, investigates, discovers, interprets and constructs knowledge (Senemoğlu, 2012).

Seeing knowledge as something that is “discovered and sought after” rather than a phenomenon that is “gained”, and dealing with knowledge as something that is the product of an internal process in human mind are the fundamental assumptions of the constructivist approach. The approaches of “permanence” and “essentialism”, which are among the movements of traditional educational philosophy, have prevented questioning, discovering, investigating and reconstructing of knowledge by advocating conveyance of universal knowledge from generation to generation, objectivity of knowledge, internalization of knowledge, teaching of classical books, and education through rote learning. With the approaches of “progressivism” and “reconstructivism”, on the other hand, knowledge was handled in a different dimension and these approaches have occupied a significant place among contemporary approaches of educational philosophy by proposing the ideas that knowledge is subjective, explorable, questionable, interpretable and constructible. The constructivist approach, which is an interpretation of the approaches of contemporary educational philosophy, urges students to think, make connections with different knowledge, and interpret (Dilaver & Tay, 2008; Tarman & Acun, 2010; Tarman, 2016).

According to Piaget (2000, p. 86), *“the intellectual procedures of a child until the age of 12 are ‘concrete’ only; in other words, he turns only to the truth itself, especially objects that can be manipulated, are tangible and compatible with true experiences.”* Therefore, students can be made to understand concepts that can be perceived through the five senses (concrete concepts) whereas it is difficult to have them grasp abstract concepts. Teaching of concrete and abstract concepts regarding life to children who are in a developmental stage makes it necessary to use different learning strategies by virtue of the very nature of the constructivist approach. “Encoding strategies”, which are among these learning strategies and play a significant role in the transfer of knowledge to long-term memory, can be listed as overt and covert rehearsal, encoding, elaboration, organization and mnemonic strategies (Tay, 2004). Of these strategies, the “elaboration or expansion” strategy was dwelt on below because it involves making “analogies” in the process of the formation of metaphors.

Elaboration occurs when a connection is established between newly received knowledge and the knowledge already present in the long term memory. In other words, the knowledge is encoded by making a connection between the existing knowledge and the new knowledge. What is worthy of attention here is the “mental schema”. Each individual possesses an innate schema. This schema expands as a result of the interaction between the individual and the environment. The connection that will be made between the newly learned knowledge and the schema will yield elaboration. Elaboration largely occurs automatically, i.e. without making an effort (Senemoğlu, 2012). Senemoğlu (2012) listed the elaboration activities that could be used in the teaching-learning process as follows; (i). Reminding of prerequisite learning, (ii). Clarity and harmony of the messages in the classroom, the way they are organized, and the manner of sitting in the classroom either increase or restrict elaboration, (iii). Expanded networks and schemas, (iv). Analogies. Before new knowledge is given, preliminary (prerequisite) knowledge that constitutes the basis for that knowledge should be gained by students and in due time, they should be reminded of prerequisite knowledge so that they can make connections among knowledge. In order to be able to perform better elaboration, the learning environment should be so organized as to allow good learning (statements should be given in a clear, harmonious and organized manner, and the classroom should be arranged in such a way as to prevent distraction), schemas showing relationships among concepts should be used and analogies should be employed to reinforce these relationships through encoding. Indeed, analogy enables us to encode new knowledge based on similarities between new knowledge and old knowledge (Senemoğlu, 2012). Two different target areas (old-new knowledge) constitute the backbone of the analogy strategy. A common goal of “metaphor” and the analogy strategy is to enable acquisition of knowledge by making a connection with the mental schema (connecting old knowledge with new knowledge) so that knowledge learned later can be acquired.

Metaphor, which assumes a very significant role in the acquisition of new knowledge (Petrie, 1976 as cited in Ortony, 1993), is a linguistic tool that makes a connection between two concepts and objects (Palmquist, 2001), and a method that enables expression of unknown objects, incidents and phenomena by relating them to known objects, incidents and phenomena (Marzano, Gaddy, & Dean, 2000). As stated previously, metaphor, which carries an educational value, facilitates the process of meaningful learning and problem solving, enables sharing of meaning between students and the teacher regarding a concept (Ortony, 1993), and facilitates conveying new ideas to a large audience (Lubart & Getz, 1997).

As a result of the review of literature conducted, it was seen that metaphor, which could be a useful tool in gaining the fundamental concepts and values included in the curriculum of “Citizenship and Democracy Education”, was largely used to measure pre-and in-service teachers’ and school administrators’ perceptions concerning the school (Aydoğdu, 2008; Saban, 2008) and the teaching profession (Cerit, 2008). In addition, metaphors were also used in curriculum development and planning, improving creative thinking and encouraging learning, and making reflective thinking effective on teachers (Vadeboncoeur & Torres, 2003 as cited in Arslan & Bayrakçı, 2006). Curriculum are not sufficient by itself for the transmission of the basic concepts and values to the students. How the implementation of the program in the teaching and learning process and the applied activities in this process has a great importance in students’ acquisition of concept and values (Keskin, 2008; Yiğit & Tarman, 2013).

Studies conducted on democracy and democracy education have concentrated on democracy, democratic attitude and democracy education (Yüce & Demir, 2011; Acun, Yücel, Önder, & Tarman, 2013), whereas studies on Citizenship and Democracy Education have focused on students' views regarding "Democracy Education and School Assemblies Project" (Genç, Güner, Pala, & Kocaoğlu, 2011), and evaluation of the project applications (Kıncal & Uygun, 2006). Moreover, studies were carried out on the level of acquisition of the concepts included in the Citizenship and Human Rights Education course (Kaya, 2006), the effectiveness of social, economic, and cultural factors and educational applications on the learning of concepts (Mulhan, 2007), students' conceptual perceptions regarding citizenship issues in the course Social Studies (Sabancı, 2008), and the effects of the use of stories in the Citizenship and Human Rights Education course on the acquisition of affective qualities (Yüksel, 2006). The studies in the literature concerning the use of metaphor as a teaching method involve the use of metaphors in the teaching of foreign languages (Beşkardeş, 2007; Kınıs, 2011; Littlemore & Low, 2006), technical concepts (Riejos, Mansilla, & Castillejos, 2001) and hypertext (Merdivan, 2007). Apparently, there are numerous studies on metaphor in the relevant literature. It is seen that these studies predominantly focus on the measurement of perceptions and attitudes. However, studies where metaphor was used for educational purposes are limited in number and these studies reveal that metaphor is an effective teaching instrument. Indeed, in a study conducted by Merdivan (2007), it was observed that metaphors used in the teaching of hypertexts affected the hypertext structures formed by the students and that the use of metaphor and ways of its use are important in hypertext teaching. Beşkardeş (2007), on the other hand, studied gifted and highly talented students learning a foreign language at Research, Science and Art Centers, concluded that the technique of metaphor use in foreign language teaching was effective in increasing academic achievement, raising willingness to learn a foreign language and ensuring the permanence of the learned words in memory, and at the same time enabled making associations and predictions through clues while learning unknown words. Riejos et al. (2001), on the other hand, conducted a study with 70 participants from the departments of civil engineering and architecture and concluded that metaphors were effective in understanding technical concepts and that they facilitated remembering. In a study conducted by Nelson (1992), the effect of metaphor on remembering was investigated and eventually it was seen that metaphor was effective on remembering. Anderson (2009), on the other hand, conducted a study where the effect of metaphors on messages designed to raise learning motivation was revealed and arrived at the conclusion that motivational metaphors increased students' enthusiasm to learn.

When relevant studies were investigated, no studies were found related to the use of acquisition of abstract concepts and values in the curriculum of Citizenship and Democracy Education course and presentation of the effects of metaphor on the process of learning-teaching through students' views.

The general purpose of this study was to determine the effectiveness of metaphor-based teaching activities on students' acquisition of abstract concepts and core values included in the themes of "Our Rights and Freedoms" and "Our Duties and Responsibilities", which are part of the curriculum of the Citizenship and Democracy Education course taught to 8th graders. For this purpose will be sought to answer the following questions:

1. Metaphor-based teaching activities are effective for students to gain the abstract concepts and core values included in the themes of "Our Rights and Freedoms" and "Our Duties and Responsibilities", which are part of the Curriculum of the Citizenship and Democracy Education Course?
2. What are the effects of the metaphor-based teaching activities used in the Citizenship and Democracy Education course on the teaching-learning process, and what are the students' views regarding this process?

Method

Mixed method was used in this study, which aimed to determine the effectiveness of the metaphor-based teaching activities on students' acquisition of abstract concepts and core values included in the themes of "Our Rights and Freedoms" and "Our Duties and Responsibilities", which are part of the Curriculum of the Citizenship and Democracy Education Course taught to 8th graders.

Mixed method studies are based on collecting qualitative and quantitative data together and then combining the powers of the two data sets to understand the research problem and making comments. The fundamental assumption of this research method is to ensure better understanding of the research problem by bringing together narrative and personal experiences (qualitative data) and statistical tendencies (quantitative data) (Creswell, 2014).

In the quantitative dimension of this study, in which mixed method was used, pretest-posttest control group model, which is one of the experimental models, was used to determine the effectiveness of metaphor-based teaching activities on gaining students abstract concepts and values. Experimental models are research models where the effects of studies are observed by the researchers themselves in the context of cause and effect and data are obtained (Karasar, 2012).

The qualitative dimension of our study, on the other hand, was planned according to the case study design, which is a qualitative research model. The design adopted in this study is a single case study because it was focused on students from a single grade, which was used as a unit of analysis. Case study is a study "where an entity is defined and customized depending on space and time." (Büyükoztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2012, p. 21) The purpose of a case study is to reveal the results of a case determined by the researcher (Yıldırım & Şimşek, 2011).

The Study Group

The present research included 8th graders attending 8İ and 8K classes of a secondary school located in the city center of Konya, during the 2012-2013 school year. The random sampling method was used in the formation of the experimental and control groups. The 8K class (17 female, 21 male) was assigned as the experimental group whereas 8İ (18 female, 18 male) was assigned as the control group. 8K was the experimental group where metaphor-based activities were implemented while 8İ class was the control group where activities included in the 8th grade Citizenship and Democracy Education program were executed. A total of 74 students were included in the study group, 38 being in the experimental group and 36 in the control group. During the process of determining the study group, the experimental (Test) form (Concept Test) was used in 8E, 8H, 8İ and 8K classes of the relevant secondary school, in the 2nd semester of the 2012-2013 school year. Following the administration of the experimental form, independent samples t test was used to determine whether the classes were equivalent to one another in terms of their levels of having the abstract concepts and values included in the Citizenship and Democracy Education program. As a result of the independent sample t test, it was seen that out of 8E, 8H, 8İ and 8K classes, 8İ and 8K are classes that are the closest to each other in terms of equivalence. Therefore, our study consisted of 8th graders attending the 8İ and 8K classes. The random sampling method was used on a group-basis while the experimental and control groups were being formed. 8K was assigned as the experimental group whereas 8İ was assigned as the control group. 8K class was the group where metaphor activities were implemented while 8İ class was the group where the activities included in the program were carried out.

While the experimental and control groups were being matched, the Concept Test pretest mean scores were compared. The independent sample t test was used to test whether the difference between the mean scores was significant or not. The independent sample t test is used "to test whether the difference between the mean scores of two irrelevant samples is significant or not." (Büyükoztürk, 2012, p. 39). The findings obtained are given in Table 1.

Table 1. Findings about the Pretest Scores of the Groups from the Concept

Test	Test	N	\bar{X}	Ss	t	p
Concept Test	Experimental	38	31.00	4.86	0.79*	0.89
Pretest	Control	36	30.11	4.79		

* $p > .05$

When the results of the independent sample t test, which was conducted to match the study groups according to their pretest scores, were analyzed, it was seen that there was not a significant difference among the pretest scores which the experimental and control group students received from the Concept Test ($p > 0.05$). It can be said on the basis of this result that the levels of the experimental and control groups' having the abstract concepts and values included in the Citizenship and Democracy Education Program were equivalent to each other.

As it was intended that students with certain qualities should be selected for the study group of the qualitative dimension of the study, 36 students in the experimental group were formed using the purposeful sampling method. According to Merriam (2013, p. 76), purposeful sampling method "*is based on the assumption that the researcher wants to explore, understand and gain insight and that selection of a sample where much can be learned is necessary.*"

Ethical Issues and Their Implementation

Before the administration of the experiment, necessary permissions were obtained from the relevant authorities. The participants were informed about the purpose of the study. Before the interview, the participants were told that voluntary participation was fundamental and that their names would be kept confidential in the study. An effort was made to ensure confidentiality during the interviews by giving code names to the participants.

Collection of the Research Data

Two data collection instruments were used to fulfill the purpose of the study. These were

1. Concept Test,
2. Semi-Structured Interview Form

Concept Test: Concept Test was developed by the researcher by reviewing the literature and making use of the Citizenship and Democracy Education Teaching Program and its course book (Kaya, 2006; Mulhan, 2007; Uyangör, 2007; Sabancı, 2008; Güven, 2010; MEB, 2010, 2012). The concepts were selected from among the core values that needed to be gained by the students and that are included in the themes of "Our Rights and Freedoms" and "Our Duties and Responsibilities", which are included in the Citizenship and Democracy Education Teaching Program and thus a trial form of the Concept Test consisting of 40 items was formed. Three questions were included for each of the identified concepts in the trial form of the Concept Test. Experts' opinions were obtained to ensure the content validity of the test (a total of 5 experts, namely 2 Testing and Evaluation experts, 2 Education Program experts and 1 Social Sciences Education expert). The number of items was increased to 48 based on experts' opinions and the test was administered to 131 8th grade students. The items of the test whose discriminatory power coefficient (r_{jx}) was below 0.20 were removed from the test. Finally, it became a 42-item test whose eventual difficulty coefficient was ($p_j=0.70$) and discrimination power was ($r_{jx}=0.37$). According to Gronlund and Linn, it is sufficient for item difficulty coefficients belonging to the items in the scale to be between 0.60 and 0.70 (1995 as cited in Bekiroğlu, 2004). According to Ebel, the discriminatory power index is recommended to be within a range of 0.30 and 0.39 (1965 as cited in Tekin, 1991). The reliability of the scale was calculated with Cronbach Alpha inner reliability coefficient. The reliability coefficient of the scale was found to be 0,82. Accordingly, it can be said that the reliability of the scale is high degree (Özdamar, 1999 as cited in Tavşancıl, 2014).

The Semi-Structured Interview Form: The semi-structured interview form is a 9-item form developed by the researcher making use of the studies in the relevant literature dealing with the conceptual dimension of metaphor. The data collection instrument is a form consisting of 12 items at the beginning. The 12-item interview form was reduced to a 9-item form on the basis of experts' views (2 Social Sciences Education experts and 1 Education Sciences expert, so 3 experts in total) and thus the data collection instrument was given its final form.

The semi-structured interview form was administered to 6 student groups consisting of 6 students each (a total of 36 students) between about 60 to 90 minutes each on a different day (in a total of 1 week). A video camera were used to collect the data.

Analysis of the Research Data

In the analysis of the quantitative data, dependent sample t test was used to compare the Concept Test pretest-posttest mean scores of the experimental and control groups within themselves whereas the independent sample t test was used to compare the Concept Test pretest-posttest mean scores of the experimental and control group students among themselves. Effect size was calculated and reported for each analysis. Microsoft Excel and SPSS 18.00 were used in the organization and analysis of the data.

The content analysis method was used in the analysis of the qualitative data. The basic goal of the content analysis method is *"to reach concepts and relationships that can account for the collected data."* (Yıldırım & Şimşek, 2011, p. 227). First, the data that were collected using the video camera were transcribed into a Word file and then coding was done by transferring the Word file into the NVivo 8 program. During the process of analysis, the views which the participants expressed regarding the Citizenship and Democracy Education course conducted through metaphor-based teaching activities were coded, then themes which could bring these codes in certain categories were found and then finally the findings were interpreted (Yıldırım & Şimşek, 2011). The categories in the study were formed on the basis of the responses which the participants gave to the questions in the interview form. Two categories entitled *"Cognitive Field"* and *"Affective Field"* were reached as a result of the analysis of the research data. The models given in Figure 1 and Figure 2 were developed in accordance with these two categories using the Word document, whereas the participants' number of references to the themes was, as can be seen in the models, shown in parentheses. The following coding system was used when word for word citations were made from the views of the participants of the study: Participant (P) and the participant number. For example; P1= The first participant

Word for word citations were made from among the views of the participants to ensure the validity of the study. As a matter of fact, making direct citations from the participants' views and explaining the results is important for validity (Yıldırım & Şimşek, 2011). Another researcher was employed in order to ensure reliability. Consensus are achieved about conducted coding and themes among researchers and discussed eventually the status undertaking under different themes checked by this researcher. Reliability *"is to use another researcher to analyze the data obtained and confirm the results reached. In this way, it can be confirmed that the results obtained are based on the data obtained rather than the researcher's own views."* (Yıldırım & Şimşek, 2011, p. 263)

Activities Conducted in the Experimental and Control Groups

The activities in the experimental and control groups were implemented by the researcher himself and before the experiment began in the experimental group, the students were provided with preliminary information about metaphorical learning in the first lesson (for one class hour) in order to inform them about how metaphors were formed (the outline of the metaphor where the target and source areas were shown) and how important metaphors were in the teaching-learning process. It was explained that experience and preliminary knowledge is important in metaphor formation and that metaphors are formed on the basis of known things.

After information was given about metaphor, how metaphor examples would be given was mentioned and then students were asked to present examples. While examples of metaphor were being given to students, it was emphasized how important it was to think freely and that emotions would also be involved in the processing of giving examples because metaphors were emotion-bearing tools; moreover, attention was paid to create a classroom atmosphere where students would feel comfortable. It was pointed out to the students that they should not make conceptual errors while giving examples of metaphor and that they should think carefully about the features of the concepts so that they could establish sound relationships between the concepts. Whether the examples coming from the students met the concept or not was stated each time, thereby trying to prevent students from giving inappropriate and irrelevant examples of metaphors.

An effort was made to give the Experimental Group (8K class) the abstract concepts and core values that needed to be gained by the students and that are included in the themes of "Our Rights and Freedoms" and "Our Duties and Responsibilities", which are included in the Citizenship and Democracy Education Teaching Program through metaphor activities, while the Control Group (8İ Class) tried to gain the same things through the activities in the course program. While a metaphor-based teaching was being administered to the experimental group, appropriate examples of metaphors were selected taking into consideration the fact that there were individual differences between the students (gender, learning etc.) and when necessary, the number of examples was increased in an effort to have the concept (ensuring concreteness and familiarity) etched in the minds of the students. "Structural Metaphors" were made use of when giving examples, because structural metaphors serve to make analogies based on the common values between the two concepts (Girmen, 2007). The activities were implemented by the researcher in a classroom environment and lasted 10 weeks.

Table 2. Activities Conducted on Experimental and Control Groups

Week	Experimental Group (8K)	Control Group (8İ)
Week 1	The use of metaphors related to human body, life and treasure for the concept "Right". Moreover, making use of metaphor examples created by the students.	Implementation of the "Those around me" activity; sharing of news from the print and visual media.
Week 2	The use of the metaphors of chain, tooth and hand for the concept of "Solidarity". Moreover, making use of metaphor examples created by the students.	Implementation of the activity entitled "we are establishing an NGO"; sharing of news from the print and visual media.
Week 3	The use of the metaphors of eye, minute and hour hands and car wheel for the concept of "Reconciliation". Moreover, making use of metaphor examples created by the students.	Implementation of the activity of ways of application for sample cases.
Week 4	Giving metaphor examples for the concepts of "Being Fair" and "Freedom": Metaphors of mother, a scale with equal pans, and seesaw; The use of the metaphors of country borders, road lane, and snowflakes for the concept of freedom. Moreover, making use of metaphor examples created by the students.	Implementation of the activity concerning the rule of law; sharing of news from the print and visual media.
Week 5	The use of the metaphors of age, homework and gold for the concept of "responsibility". Moreover, making use of metaphor examples created by the students.	Implementation of the activity of "high quality society and good quality life, and the activity of "I recommend".

Table 3. Continue

Week	Experimental Group (8K)	Control Group (8İ)
Weeks 6 and 7	Providing metaphor examples for the concepts of "Peace" and "Equality": Metaphors of water and atmosphere for the concept of peace; the use of metaphors of the sky, and the world for the concept of equality. Moreover, making use of metaphor examples created by the students.	Implementation of the activity of "What is the solution?"
Week 8	Giving metaphor examples for the concepts of "Patriotism" and "Tolerance": Metaphors of mother, human being and human skin for the concept of patriotism; The use of metaphors of the sun and scientist for the concept of tolerance. Moreover, making use of metaphor examples created by the students.	Implementation of the activity of "Exemplary Citizen" and the activity of "Our Citizenship Duties and Citizenship".
Week 9	The use of the metaphors of puzzle, balloon and shopping for the concept of "love". Moreover, making use of metaphor examples created by the students.	Implementation of the activities of story, painting and poster preparation.
Week 10	The use of the metaphors of eagle's wings, forest and flag for the concept of "honor" "Moreover, making use of metaphor examples created by the students.	Implementation of the activity concerning the reading text (Ah Mana Mu).

Findings

In this section, the findings obtained as a result of the administration of the data collection instruments were analyzed and interpreted according to the sub-goals within the scope of the goals of the study.

Findings related to the First Sub-Aim of the Research

The first sub-aim of the study is "Metaphor-based teaching activities are effective for students in gaining the abstract concepts and core values included in the themes of 'Our Rights and Freedoms' and 'Our Duties and Responsibilities', which are Curriculum of the Citizenship and Democracy Education Course?" In order to test this sub-aim, the posttest mean scores which the students in the experimental and control groups received from the Concept Test and the pretest-posttest mean scores of the experimental and control groups students within themselves were compared.

Table 4. A Comparison of the Concept Test Posttest Mean Scores of the Students in the Experimental and Control Groups

Test	Test	N	\bar{X}	Ss	t	p	η^2
Concept Test	Experimental	38	36.00	3.89	2.92*	0.005	0.67
Posttest	Control	36	33.22	4.30			

* p<.05

In Table 3, the Concept Test posttest mean scores of the students in the experimental and control groups were analyzed by comparing them with the independent sample t test. According to the data that were obtained, there was a significant difference in favor of the experimental group among the Concept Test mean scores of the students in the experimental and control groups ($t=2.92$; $p<.05$). According to these findings, it is observed that the metaphor-based teaching activities conducted in the experimental group were more effective than the activities in the existing program in gaining the abstract concepts and values included in the Curriculum of the Citizenship and Democracy Education Course to the students. Its effect size was $\eta^2=0.67$ and this was interpreted to mean a medium-level effect size (Cohen, 1988).

Table 4. A Comparison of the Concept Test Pretest-Posttest Mean Scores of the Students in the Experimental Group

Group	Test	N	\bar{X}	Ss	t	p	η^2
Experimental	Posttest	38	36.00	3.89	5.13*	.000	1.13
	Pretest	38	31.00	4.86			

* $p<.05$

In Table 4, the Concept Test pretest-posttest mean scores of the students in experimental group were analyzed by comparing them with the dependent sample t test. According to the results of the analysis, the Concept Test posttest mean scores of the students in the experimental group were significantly higher than their pretest mean scores ($t=5.13$; $p<0.01$). This finding indicates that the metaphor-based teaching activities conducted in the experimental group were effective in gaining the abstract concepts and values included in the Curriculum of the Citizenship and Democracy Education Course to the students. Its effect size was $\eta^2=1.13$ and this was taken to mean a large effect size (Cohen, 1988).

Table 5. A Comparison of the Concept Test Pretest-Posttest Mean Scores of the Students in the Control Group

Group	Test	N	\bar{X}	Ss	t	p	η^2
Control	Posttest	36	33.22	4.30	2.96*	0.01	0.68
	Pretest	36	30.11	4.79			

* $p<.05$

The Concept Test pretest-posttest mean scores of the students in control group were analyzed by comparing with the dependent sample t test (Table 5). According to the results of the analysis, the Concept Test posttest mean scores of the students in the control group were significantly higher than their pretest mean scores ($t=2.96$; $p<0.05$). This finding indicates that the activities conducted in the control group were effective in having the students to gain the abstract concepts and values in the Citizenship and Democracy Education course included in the Citizenship and Democracy Education Curriculum. The effect size was $\eta^2=0.68$ and this was interpreted to be a medium-level effect size (Cohen, 1988).

Findings and Comments related to the Second Sub-Aim of the Research

The responses which the students in the experimental group gave to the questions in the interview form to find a solution to second sub-aim of the research, "What are the effects of the metaphor-based teaching activities used in the Citizenship and Democracy Education course on the teaching-learning process, and what are the students' views regarding this process?", were subjected to content analysis.

As a result of the analyses made, it was found that students' views regarding the effects of the metaphor-based activities on the teaching-learning process were concentrated on two main themes, namely cognitive domain and affective domain. The main themes and the sub-themes were given under separate titles below.

Findings Regarding the Effects of Metaphor-based Activities on the Cognitive Domain

The model which was obtained as a result of a qualitative analysis of the cognitive domain views of the 8th grade students in the study group concerning the use of the metaphor-based activities in the teaching of abstract concepts, values and skills included in the Curriculum of the Citizenship and Democracy Education Course is given in Figure 1.

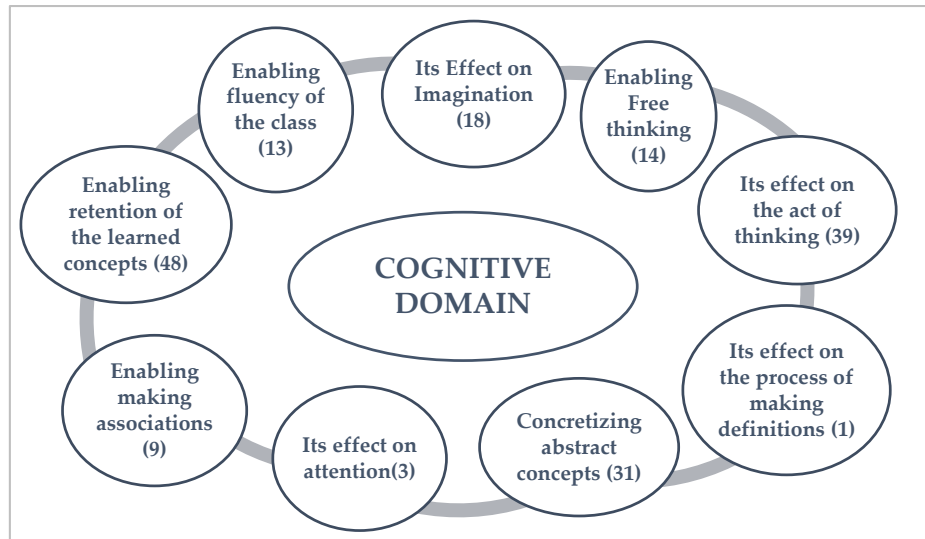


Figure 1. A Schematic Display of the Effects of Metaphor-Based Activities on Cognitive Domain

Ensuring retention of the learned concepts in the mind: As a result of the qualitative analysis, it was found that the highest loading was on the theme entitled “ensuring retention of the learned concepts in the mind”. In this framework, it can be argued that metaphor-based activities used in the teaching of abstract concepts and values included in the Curriculum of the Citizenship and Democracy Education Course serve to ensure retention of the learned concepts in the mind. Some of the student views referring to this theme are given below:

“Abstract concepts in the Citizenship course are becoming more permanent in the mind through the use of metaphors. They are used for the purpose of making unknown things more permanent in the mind, thereby enabling their teaching and learning faster. In the first semester, only the definitions of the concepts were made and left there in the citizenship course and in time the definitions of the concepts were forgotten but this semester has been different from the previous one.” (K1)

“Of course, metaphor ensures retention in the mind. For example, a classmate likened the red blood cells to patriotism because if we think our body is our homeland, red blood cells fight against external diseases in other words they protect our body. This example made citizenship permanent in my mind.” (K3)

Its effect on the act of thinking: The second highest loading was made to the theme “its effect on the act of thinking” by the students. In this framework, it is seen that students emphasize that metaphor-based activities have an effect on the act of thinking. Some of the student views referring to this theme are given below:

“Since metaphor examples enabled us to think a lot, they facilitated our thinking and made us relaxed. This is valid not only for metaphors, but in general makes it easy for us to think about other things.” (K7)

“To my mind, we were thinking in a broader sense thanks to metaphor because we concretized many concepts around us through metaphors, that is, we were thinking in a broader way making use of the concrete concepts.” (K8)

Concretizing abstract concepts: One of the themes on which students made the most loading regarding the effectiveness of the metaphor-based activities in the teaching of abstract concepts included in the Curriculum of the Citizenship and Democracy Education Course was the theme “concretizing abstract concepts”. The students stated that the concepts whose meanings they did not know and had difficulty in explaining were concretized by likening them to known concepts. Two of the student views referring to this theme are as follows:

“Well, I believe that since it is a concrete example, and tangible, it enables us to be more knowledgeable and to think better. That is to say, if we give an example, if we liken it to something concrete, I think that is better.” (K11)

“Thanks to metaphor, we learn better the things whose meanings we do not know and have difficulty in explaining by likening them to concrete beings.” (K10)

Its effect on imagination: It is seen that the students’ views concerning the theme of metaphor’s “effect on imagination” have a significant loading among the themes identified within the scope of cognitive domain. The students pointed out that metaphor-based activities mobilized their imagination by urging them to think, and that this had something to do with that characteristic of metaphor which required making associations between concepts on the basis of similarities. 16 of the students stated that metaphor had a positive effect on imagination whereas two of them said it limited imagination. When students’ views arguing that metaphor limits imagination are examined, it can be said that students’ misconception about the meaning of the concept of imagination may have caused them to express such a view. Some of the student views referring to this theme are given below:

“I think metaphor helps us improve our imagination because we are trying to find out different things in a metaphor, which helps increase both our imagination and productivity.” (K12)

“We made the definition of the concept of solidarity in class. You said “liken it to something concrete” and everyone hesitated for some time, thought and thought and then you gave an example. After that, many ideas came to our minds, everyone said interesting things in this regard, which indicates that it mobilizes and improves imagination.” (K13)

“To tell the truth, metaphor limits our imagination because imagination does not only contain concrete concepts, but there are also abstract concepts; in metaphor, we have to liken to a concrete thing, which limits our imagination.” (K16)

Enabling free thinking: A significant portion of the students stated that metaphor-based activities had an effect on free thinking. Students described metaphor as an instrument that urged them to think freely, removed the limitations on the act of thinking and enabled free thinking. Some of the student views referring to this theme are given below:

“I think it has worked well, because there are no set rules in metaphor, there no boundaries, for example we always thought about one specific topic in the classes in the past semester; we can participate in the class with more ease because there are no lines in metaphor restricting our brain and capacity, which shows that it is better when we share in classes and life.” (K12)

“One had an explanation and we had to memorize it but now something like freedom of thought came into being. We can think as we like, we can make comments. Then, we are limited by no boundaries and this is better.” (K11)

Enabling fluency of the class: Students' references to the theme "ensuring fluency of the class" regarding the metaphor-based activities falling in the cognitive domain occupy a significant place among the existing themes. When students' views were examined, it was seen that some students stated that metaphor-based activities were effective in ensuring fluency of the class whereas others disagreed with this view. 11 students who expressed positive views stated that thanks to metaphor-based activities, a definition-based learning process (which was claimed to be boring and kill the interest in the class) was replaced by one where new examples were given inspired by metaphor examples given by peers, interest in the class increased and an enjoyable environment emerged. Two students who expressed negative views, on the other hand, stated that they perceived no difference between the classes where metaphor-based activities were used and those where these activities were not used and that in fact the classes where metaphor-based activities were not used were more pleasurable and fluent. When student views of both sides are examined, it can be said that classes where metaphor-based activities are used run more smoothly. Some of the student views referring to this theme are given below:

"I was bored of definitions, I did not want to listen to the classes, but when metaphors began to be used in classes, my interest in classes increased, they became more enjoyable and there came times when I could not understand how fast time flew." (K4)

"Yes, metaphors bring joy. Last semester, the teacher constantly taught us classes but we listened to him without understanding but now classes became more fun with examples of metaphor. There were times when I wondered how quickly the class ended." (K2)

"The classes in the past semester passed more quickly in terms of humor. Although metaphor is good in teaching concepts, the classes where metaphor is used are not as fluent as the classes in the past semester." (K5)

"I think the classes before metaphor and after it were the same. I saw no difference in both classes in terms of fluency and enjoyableness." (K9)

Enabling making associations: Some of the students in the study group stated views regarding the function of metaphor-based activities related to "enabling making associations". The students emphasized that thanks to metaphor-based activities, definitions that were hard to retain were recalled with more ease through associations. Some of the student views referring to this theme are given below:

"Definitions are usually long and they are hard to keep in mind. Thanks to metaphor, we can make an association with one word." (K20)

"I did not use to like the concept of solidarity much, I liken it to knitted fabric using a metaphor example. A piece of fabric is not of any use on its own, but when pieces of fabric come together, they constitute clothes. This example reminds one of the definition of solidarity. In solidarity, people stand on their feet with each other's help, one person is of no avail but as a result of group work, everyone is able to do a lot of things." (K13)

Its effect on attention: Some of the students in the study group, stated views concerning the effects of metaphor-based activities on attention. The students pointed out that due to various reasons (the fact that Citizenship and Democracy Education class was in the early hours of the school day, that they were sleepy during the classes, and that classes were conducted in a manner filled heavily with definitions), they could not pay full attention to classes, but thanks to metaphor-based activities, they participated in classes and their attention increased. Some of the student views referring to this theme are given below:

"I used to like the Citizenship course before you began to teach it. However, reasons such as the fact that the class was in the early hours initially, we attended the class half-sleepy and our teacher before you taught the class through definitions did not make the class fluent and enjoyable. But, when the class began to be conducted through metaphors, our attention increased and our minds worked hard to make analogies. Therefore, the class became enjoyable and fluent." (K19)

"The class was in the early hours at the beginning, and we could not pay our full attention to the class because we were sleepy, but I felt a change in myself with metaphor. Participation in class increased and I found the class more enjoyable." (K21)

Its effect on the process of giving definitions: In this study, which aimed to reveal the effects of metaphor-based activities on the teaching-process, the students stated their views regarding the theme of its effect on the process of giving definitions, which is within the scope of cognitive domain. When the students' views are examined, it can be said that as a result of metaphor-based activities, the students are not confined to a single definition only, and that thanks to association they are able to give different and easy definitions. Some of the student views referring to this theme are given below:

"I used to stick to one definition only in the past, I always tried hard to bring things together, but with metaphor, an example comes to my mind and helps me make my definition more easily." (K13)

Findings Regarding the Effects on Metaphor on Affective Domain

The model obtained as a result of the qualitative analysis of the affective domain views of the primary education 8th grade students, included in the study group, regarding the use of metaphor-based teaching activities in the Citizenship and Democracy Education class is given in Figure 2.

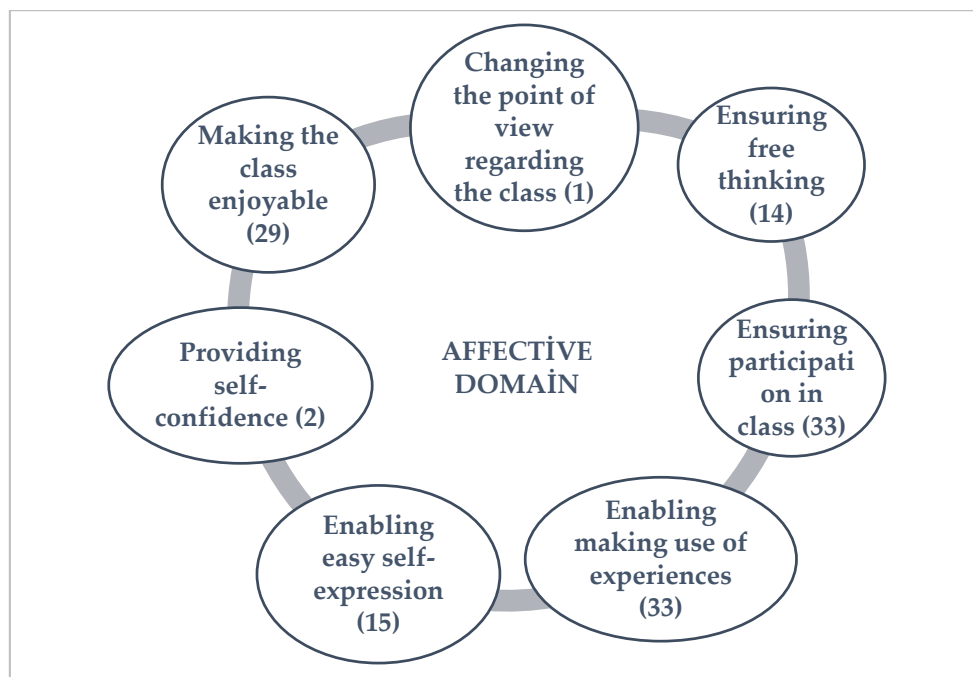


Figure 2. A Schematic Display of the Effects of Metaphor on Affective Domain

Ensuring participation in class: As a result of the content analysis of the data obtained from the students, it is observed that the highest loading by the students among the themes regarding the effects of metaphor on affective domain is on the theme “ensuring participation in class”. The students stated that thanks to metaphor, everyone participated in class and that sharing of experiences played a part in this. Two of the students said that metaphor was not effective in ensuring participation in class. As a reason for this, they pointed out that creating metaphors urged them to think, and tired them physically. Some of the student views referring to this theme are given below:

“Everyone wants to say something because we find metaphor interesting and in this way participation in class is ensured. While quite a lot of mates participate in this class, they remain passive in other classes (such as Math, Science and Turkish) and do not participate in class. I myself did not much participate in class last semester but now I do.” (K1)

“In our previous classes, our teachers gave examples of their experiences and we did, too. But, only certain people gave examples. After the introduction of metaphor, everyone became more enthusiastic and made an effort to give examples.” (K20)

“I think it did not increase participation. In the past semester, everyone shared their experiences, participation was ample but now no one participates because they are busy thinking about metaphors.” (K9)

Enabling the use of experiences: One of the themes on which the students made the highest loading in regard to affective domain is the theme of “enabling the use of experiences”. The students stated that experiences were an important source during the process of metaphor construction and that they were able to make analogies by making use of (their) experiences. Some of the student views referring to this theme are given below:

“If we did not have experiences, we could not find anything to liken to.” (K17)

“I did not make use of my experiences while I was constructing metaphors. I do not have many experiences but there were times when I thought about others’ experiences and used them in metaphors.” (K19)

“We make use of our experiences, for example of various things. In other words, our experiences help us in metaphors because we use metaphors as a result of our experiences.” (K3)

Making the class enjoyable: When the views of the students in the study group regarding the use of metaphors in Citizenship and Democracy Education class are taken into consideration, one of the themes with the highest loading is “making the class enjoyable”. The students stated that thanks to metaphor, they got rid of complicated and incomprehensible definitions and the class ran more enjoyably due to comical metaphors. When the data obtained from the interviews with the students are examined, it is seen that two of the students stated that metaphor did not render the class enjoyable. The reason why they seem to hold such a view seems to be that metaphor urges them to think and participate in class but they prefer to stay as passive participants in class rather than taking an active part. Some of the student views referring to this theme are given below:

“Compared with the previous semester, well I was really bored in the past semester because there was not fun and participation in class; now, everyone remembers something they have experienced, says oh such an such a thing happened in the past, everyone laughs when something funny is told, and when we start to talk about a subject, everyone raises their fingers to talk about that topic. I feel sorry when my turn does not come because right at that moment a lot of ideas come to my mind, and in this way our class becomes more enjoyable.” (K11)

“With metaphor, we got rid of confusion created by definitions. Classes became more enjoyable.” (K22)

“For me, classes before and after the metaphor were always the same. I saw no difference in either class in terms of fluency and enjoyableness.” (K9)

"To my mind, metaphor does not make the class enjoyable and fluent because half of the class hour is wasted while thinking. I took more pleasure in the first semester, we performed the activities in the course book as a group; a few people in the group were more active whereas others took it easy and the class ran smoothly and fluently." (K25)

Enabling easy self-expression: When the students' views regarding the theme of "enabling easy self-expression", which is included in the affective domain, are taken into consideration, it is seen that quite a lot of references have been made to this theme. The students stated that thanks to metaphor, they were able to think freely, and expressed themselves smoothly as they did not encounter any limitations while they were thinking. Two of the students pointed out that metaphor did not help them to express themselves smoothly, which was perhaps because they acted diffidently, worried that they could give similar or wrong examples or they might not be welcome by their classmate; but they added that they were able to think freely and participate in class thanks to metaphor. Some of the student views referring to this theme are given below:

"For example, I sometimes could not decide whether to say or not in class, but then someone told it and I regretted terribly. As you said, I was going to give the tooth example, but I gave up and a classmate gave it and I asked myself why I did not do it. Then, with metaphor, I felt myself comfortable in expressing myself. Metaphor does not impose any restrictions and I can think freely." (K4)

"I think that I can express myself easily thanks to metaphor. I cannot express my ideas properly in other classes but in this class, I can. Initially, I was afraid of saying wrong things but subsequently this fear disappeared." (K25)

"I was acting diffidently wondering whether that example had been given or not and could not express myself freely. I agree that it renders us free while we think." (K26)

"I could not express clearly, ideas came to my mind about all topics but I could not say them. I could not express them fearing that they might be wrong or my classmates might laugh at me. But, afterwards, I participated more freely with metaphors." (K22)

Ensuring taking an interest in class: It is seen that students' views regarding the effects of metaphor use on the teaching-learning process have a loading on the theme of "taking an interest in class". The students stated that thanks to metaphor, they got rid of the boredom of a teaching-learning environment teeming with definitions, thought actively concentrating on the class during the process of making analogies and thus took an interest in class, and did not realize how the time passed. Some of the student views referring to this theme are given below:

"I used to get bored of making definitions and I did not want to follow the class. But, when metaphor began to be used in class, my interest in class increased, the class became enjoyable and there were times when I did not understand how fast time passed." (K4)

"I think it makes classes enjoyable because people think about a subject, rack their brains about it and thus they take an interest in the class. I, too, took more part in class thanks to metaphor. We could not think much in previous classes but metaphor increases our attention and interest. We participate more in classes. While we think hard about metaphor, we make ourselves active and the class becomes fluent and enjoyable." (K23)

Providing self-confidence: One of the themes on which the students have a loading within the scope of affective domain is the theme of “providing self-confidence”. The students stated that metaphor was an effective tool in improving their vocabulary, and this led to a feeling of self-confidence in them, which in turn led to participation in class. Some of the student views referring to this theme are given below:

“Metaphor use benefited us greatly in reducing the number of words whose meanings we did not know and improving our vocabulary. Thanks to metaphor, participation in class increased and so did our self-confidence.” (K15)

“I think the effect of conducting this class through metaphors has a huge effect on me. I did not have self-confidence and did not participate but now I see that metaphor has significantly increased my participation and self-confidence.” (K14)

Changing the point of view regarding the class: Among the themes which were within the scope of affective domain and to which references were made was the theme of “changing the point of view regarding the class”. The students stated that they made analogies thanks to metaphor and in this way the class ran smoothly and prevented them from approaching the class with prejudice. Some of the student views referring to this theme are given below:

“Metaphor changes our point of view of the class, for example we approach the math class with prejudice and call it a very difficult class but we began to deal with metaphors this semester, and when we liken some subject to certain things, the class is becoming more enjoyable, in other words, we are changing our point of view.” (K27)

Results, Discussion and Suggestions

In this study, the effect of metaphor-based activities on gaining to the students the abstract concepts and core values included in the themes of “Our Rights and Freedoms” and “Our Duties and Responsibilities”, which are Curriculum of the Citizenship and Democracy Education Course taught in the 8th grade was investigated.

The first sub-aim of the study was “Metaphor-based teaching activities are effective in gaining students the abstract concepts and core values included in the themes of ‘Our Rights and Freedoms’ and ‘Our Duties and Responsibilities’, which are Curriculum of the Citizenship and Democracy Education Course?” According to the data obtained, a significant difference was found between the Concept Test posttest mean scores of the experimental and control groups students in favor of the experimental group. This result shows that metaphor-based activities implemented in the experimental group were more effective than the activities in the existing program in gaining the students the abstract concepts and core values included in the Curriculum of the Citizenship and Democracy Education Course. This finding is in parallel with the findings of the studies in the relevant literature (Beşkardeş, 2007; Riejos et al., 2001; Nelson, 1992). In an experimental study where the metaphor technique was used in teaching foreign languages to gifted and highly talented students, Beşkardeş (2007) found that metaphor increased academic achievement. In a study conducted by Riejos et al. (2001), an attempt was made to measure the effect of metaphor on ensuring comprehension and retention of technical concepts by students in the departments of civil engineering and architecture by showing them posters bearing examples of metaphor, and eventually found that metaphor was an effective tool in ensuring the comprehension and retention of technical concepts. Nelson (1992), on the other hand, assigned the participants sentence, story and metaphor tasks and tried to determine the effects of these three tasks on the participants’ remembering their past. As a result of the study, it was found that metaphor had more effect on remembering than sentence and story tasks.

The interviews held with the participants to arrive at more detailed information about the first sub-aim of the study are in support of the research findings. For example, participants K1 and K2 stated that metaphor was an effective tool in faster learning of unknown concepts and ensuring their retention saying that *“Abstract concepts in the Citizenship course are becoming more permanent in mind through metaphor. It is used to make unknown things more permanent in mind and thus learn and teach them faster. While the Citizenship course was being taught in the first semester, only the definitions of the concepts were being made and they were forgotten in time but this semester has been different from the previous.”* (K1), *“It helps us to keep in mind concepts which we know but have difficulty while thinking about. For example, whenever I look at the watch, I remember the example of reconciliation and think that the minute hand and the hour hand are acting in reconciliation”* (K2).

The second sub-aim of our study was *“What are the effects of the metaphor-based teaching activities used in the Citizenship and Democracy Education course on the teaching-learning process, and what are the students’ views regarding this process?”* The findings that were obtained from the interviews held with the participants to this sub-aim of research and the studies in support of these findings are as follows.

The participants stated that metaphor was effective in the learning and retention of unknown concepts. According to Tebbe, Leka, Garcia and Erramouspe (1999 as cited in Gibbs, 2008), if the metaphors used comply with the principles of metaphor, in other words, if they are concrete, then they ensure the permanence of the learned concepts in mind. Likewise, Arslan and Bayrakçı (2006) saw its function of ensuring retention, or permanence in mind among the most important features of metaphor. In a study conducted by Nelson (1995), the effectiveness of metaphor as an educational model was investigated and it was found that metaphor was effective in ensuring permanence in mind.

The participants pointed out that thanks to metaphor, they concretized abstract concepts and were involved in an intensive state of thinking during concretization, in other words, metaphor urged them to think. According to Sanchez, Barreiro, and Maojo (2000 as cited in Arslan & Bayrakçı, 2006), metaphor triggers the process of exploration concerning concepts by improving creative thinking, and in this way it sets imagination in motion, which is a prerequisite for the exploration process. Moreover, metaphor enables us to think easily about certain concepts (Perry, 1995 as cited in Perry & Cooper, 2001), and construct our ideas (Perry & Cooper, 2001).

The participants stated that metaphor was an effective technique in concretizing abstract concepts which are unknown and hard to explain. According to researchers, metaphors are effective tools ensuring concretization of abstract concepts (Arslan & Bayrakçı, 2006, p. 106; Keranen, 2005 as cited in Merdivan, 2007, p. 25; Swartz & Parks, 1994, pp. 313-314)

The participants explained that their minds worked actively during the process of metaphor-construction and their imaginations improved. However, some of the participants maintained that metaphor limited their imagination because they used concrete things (concepts, experiences) to construct metaphors. According to Sanchez et al. (2000 as cited in Arslan & Bayrakçı, 2006), metaphor sets imagination in motion by supporting the thinking process. Girmen (2007) indicated that metaphor initiated a cognitive process in individuals and enabled creative thinking and imagining.

The participants stated that they were able to think freely thanks to metaphor and that they did not encounter any intellectual restrictions. Moreover, some students argued that metaphor enabled fluency of the class, but others disagreed in this regard. Girmen (2007) pointed out that metaphor enabled creative thinking by removing the barriers before the thinking of individuals.

At the same time, the participants explained that contenting oneself with definitions related to a concept was not sufficient for the retention of the definition but thanks to metaphor, the definition of the relevant concept was remembered through association. According to Marschark and Hun (1985 as cited in Nelson, 1995), metaphor represents the associative meanings in a multiple manner in the mind. Beşkardeş (2007) revealed that metaphor was an effective tool for students to make associations and use clues. On the other hand, the views stating that metaphor ensured students' concentration on the class by making the lesson fluent and enjoyable are in parallel with the previous research findings. For example, some previous studies indicated that metaphor statement was important in attracting attention of readers due to its concrete nature (Ortony, 1993), while others explained that it was effective in ensuring the concentration of attention on comprehension (Beşkardeş, 2007).

According to Swartz and Parks (1994), metaphor enables definition of what is intended to be said. Çelikten (2006) pointed to that feature of metaphor which helps define ideas that are hard to understand, whereas Tompkins and Lawley (2002 as cited in Girmen, 2007) stated that metaphor had the quality of defining one concept through another meaning domain. The views of the participants which were obtained within the scope of this study stating that "metaphor facilitated making definitions" and the data obtained seem to be in support of the findings in the relevant literature. Moreover, in a study conducted by Beşkardeş (2007), it was stated that the students in whom the metaphor technique was applied participated in the activities more enthusiastically and more regularly; likewise, the participants of this study also pointed out that metaphor increased participation in class, and that it was even effective in enabling classmates who did not participated in class to do so with metaphor.

The participants indicated that experiences were an important source in constructing metaphors. Rico (1976) emphasized that metaphor was a result of mental processes, and that one needed experiences for mental processes to act as a source for the formation of metaphor-meaning that metaphor was a bearer of experiences-, thereby drawing attention to the relationship between metaphor and experience. Haynes (1978 as cited in Ortony, 1993) regarded the students' experience base as the source of metaphor whereas Arslan (2008) stated that the fundamental reason behind the fact that metaphor provided mental connections was to bring abstract or unknown concepts closer to our life.

A large majority of the participants indicated that thanks to metaphor, they made use of their experiences (they gave funny examples from their lives), got rid of confusion caused by definitions, became eager to participate in class and thus classes grew more enjoyable. According to Keranen (2005 as cited in Merdivan, 2007), metaphor makes a boring topic amusing. Lustie (1998), on the other hand, with reference to metaphor's characteristic of comparing two objects and phenomena, stated that this comparison would bring along the feeling of laughter/amusement, in other words metaphor would provide a feeling of joy.

A significant portion of the participants pointed out that they were able to express themselves easily thanks to metaphor and that this occurred because metaphor enabled free thinking, while some participants argued that they could not express themselves due to fears that they might give wrong or similar examples. This latter contrary view arises not because of the effect of metaphor but because of the student's worry. Likewise, according to Aydoğdu (2008), metaphor had an effect on our self-expression. Beşkardeş (2007) observed that students pronounced words easily thanks to metaphor.

The participants stated that metaphor was instrumental in raising interest in class and they did not realize how fast time elapsed. In a study conducted by Anderson (2009), an attempt was made to reveal the role of metaphor in messages designed to increase learning motivation. It was concluded that learning metaphors used in the study increased students' eagerness towards the class and the learning process. In a study conducted by Sasaki (2010) where instructors in the Department of English Language were asked to express their views regarding the use of metaphor in classroom discourse, some of the instructors pointed out that metaphor was used to attract students' attention.

The participants indicated that thanks to metaphor their vocabulary expanded and their attendance and self-confidence increased. Moreover, classes became more enjoyable through metaphors, which in turn changed their views of the class. According to Gezer (2006), metaphor has the powerful quality of changing the point of view towards the outer world.

In conclusion, it was demonstrated through both qualitative and quantitative research findings that metaphor-based activities were effective for students to gain the abstract concepts and core values included in the Curriculum of the Citizenship and Democracy Education Course. It was concluded that metaphor-based activities (i) enabled concretization of abstract concepts and values, (ii) increased students' participation in class as well as their attention and interest, (iii) urged students to think and enabled thinking freely, (iv) improved, (v) ensured fluency of class, (vi) made the class enjoyable, (vii) increased students' self-confidence and enabled them to make use of their experiences, (viii) enabled students to express themselves easily and changed their points of view regarding the class.

The following suggestions can be made on the basis of the research findings:

- It should be taken into consideration that in local studies about metaphor, it has been used predominantly to measure perceptions and attitudes, but that its use as a means of teaching is limited.
- The use of metaphor in disciplines where abstract concepts are abundant should be expanded and efforts should be made to ensure this.
- The time factor should be taken into account in experimental studies on metaphor and in this way the procedure of measuring the effect of metaphor on increasing permanence should be implemented in a thorough manner.

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