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An Investigation of Secondary School Seventh Grade Students' Implicit and Explicit Knowledge about the Concept of Citizen *

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Abstract

The conceptual understanding related to being a citizen involves not only the explicit knowledge acquired through explicit instruction and course books but also the implicit, experiential knowledge acquired in socio-cultural and political environments. Explicit and implicit conceptual knowledge we have acquired about being a citizen affects our values, attitudes and behaviours we demonstrate as citizens. The purpose of this study is to investigate secondary school seventh grade students' implicit and explicit knowledge about the concept of citizen. The study adopted a convergent parallel mixed method. 27 students were chosen using typical case sampling for the identification of implicit knowledge, and 124 students were chosen using simple random sampling method for the identification of explicit knowledge. Data were collected from secondary school seventh grade students who were enrolled in three state schools, who had their parents' consent and who volunteered to participate in the study. Implicit knowledge about the concept of citizen was identified using the repertory grid technique, and explicit knowledge was identified using the "Explicit Knowledge Test" about the concept of citizen including seven open-ended questions. Qualitative data obtained for implicit knowledge were analyzed using content analysis methods and Idiogrid 2.4 program. Students' answers given in the explicit knowledge test were analyzed using a holistic rubric. Analysis of the data included the use of frequencies, percentages, arithmetic means, standard deviation, t-test, and one-way ANOVA.

An analysis of implicit knowledge about the concept of citizen showed that the students interpreted the concept of citizen mostly as "being a *good person*" and least as "*an individual who has rights*". According to the students' eigenvalue (Euclidean distance coefficient) that reflected the difference between the "Me as a citizen" and "What kind of citizen do I want to be", "Me as a citizen compared to other people in my environment", "What kind of a

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citizen do I have to be? central elements showed that majority of the students had high eigenvalues (self perceptions) as citizens. Majority of the students were found to have "*first level-insufficient*" explicit knowledge about the concept of citizen; a small number of students had "*second level-partially sufficient"* knowledge; and there were no students who had *"third level-mostly sufficient"* and "*fourth level-sufficient*". Students' explicit knowledge test scores displayed significant differences according to mother's education level, having friends with different cultural characteristics, and the languages spoken at home variables; no significant differences were determined according to gender, the location of the school, father's education level, and mother language variables.

Introduction

People use concepts in order to make sense of the entities, events, and situations and to convey their meanings. In the conceptual development process, we acquire implicit and explicit knowledge through our experiences in a formal or informal way and represent this knowledge in our mind explicitly or implicitly (De Jong & Ferguson Hessler, 1996; Murphy & Medin, 1985; Taber, 2013).

Experiences of people in the process of their interaction with the environment are the results of their conscious (explicit) and unconscious (implicit) learning experiences (Sun, 2001; Wood, 2003). Reber (1993, p.5) defined implicit learning as "*the acquisition of knowledge that takes place largely independently of conscious attempts to learn and largely in the absence of explicit knowledge about what was acquired".* As for explicit learning, it is the process of knowledge acquisition in which the individual realizes by using conscious processes and directly tests a hypothesis (Ellis, 2005). Explicit learning occurs in organized learning and teaching environments (Taylor, 2007). Hence, conceptual learning, which forms base for acquiring knowledge, involves not only explicit conscious processes but also unconscious, implicit processes and representations (Ziori & Dienes, 2008). The emphasis on the role of unconscious processes in the formation and conceptualization of cognition has increased the importance of implicit knowledge in the process of acquiring knowledge (Taber, 2013). According to According to Vygotsky (1962), the development of thinking is the process of gradual internalization of external effects. These processes activated through human cognition is a product of social experiences realized in socio-cultural interactions (as cited in Wood, 2003).

According to Micheal Polanyi (1958), implicit knowledge forms base for explicit knowledge, and it means that we know more than we can tell (Reber, 1993). Implicit knowledge is the type of knowledge which is acquired without using conscious learning strategies and which is difficult to express what and why; however, explicit knowledge can be expressed and defined with words or in written form (Reber, 1993; Taylor, 2007). Implicit knowledge includes the beliefs, schemas, perspectives, and intuitional theories that help individuals to comprehend and define the real world (Nonaka, 1994; Taber, 2013). Mathews, Roussel, Cochran, Cook, & Dunaway (2000, as cited in Akbulut Taş, 2010) reported that implicit (experiential) knowledge is gained through experiences, that implicit knowledge is dominant in complicated tasks, and that the implicit knowledge gained in real life is combined with the reflective knowledge in the related subject domain. According to Mathews and colleagues, while implicit knowledge is acquired from good examples or cases, explicit knowledge is acquired from direct instruction, books, and conscious thoughts about the concepts (as cited in Akbulut Taş, 2010). In addition, the related literature indicates that implicit and explicit knowledge cannot be separated from each other, and the interaction between these two knowledge types is complicated and multidimensional (Ellis, 2005; Sun, 2001). Implicit and explicit knowledge might develop independently of each other, or they could be acquired or developed through interaction with each other. Implicit knowledge might involve explicit knowledge, and explicit knowledge might involve implicit knowledge (Ziori & Dienes, 2008); these two types of knowledge might be transformed to each other by interaction (Nonaka, 1994).

Interaction between implicit and explicit knowledge is as follows (Nonaka, 1994; Nonaka & Toyama, 2003):

1. *Socialization, from implicit knowledge to implicit knowledge:* Experiences shared in real life are acquired from master-apprentice interaction, observation, imitation and practice; they can be learned from mentors and peers through master-apprentice interaction.

2. *Externalization, from implicit knowledge to explicit knowledge*: Implicit knowledge could be transformed to explicit knowledge through discursive consciousness between individuals, definitions, hypotheses, metaphors, analogies, narration, visualization, modelling, prototypes, probing, and guessing. In other words, they could partly be revealed through reflection.

3. *Internalization, from explicit knowledge to implicit knowledge*: Explicit knowledge could be transformed to implicit knowledge through praxis, action, and repetition. Transformation could happen by individuals' reflecting this knowledge to their actions and work by reading and placing them into experiences and simulations. The learner first learns the explicit knowledge and then transforms it to implicit knowledge without losing the original, open representations (Ellis, 2005).

4. *Combination, from explicit knowledge to explicit knowledge*: New explicit knowledge can be acquired by sorting, re-categorization, adding new information on it, and re-contextualization. It could be acquired from direct instruction, books and internet sources.

Implicit representation of the conceptual knowledge in the cognitive system is closely associated with Kelly's Personal Construct Theory (Taber, 2013). Jonassen (2006) studied Kelly's personal construct theory within the actional view of concepts learning approach. According to the actional view of concepts, concepts are represented in cognitive structure mainly according to the contexts and purposes used by individuals rather than their descriptive attributes or similarities (Jonassen 2006; Taber, 2013). Kelly (1955) used the term *construct* to refer to patterns used by individuals in order to comprehend and construct events. Personal construct is a bipolar system that is formed with grouping the similarities and differences of the features of cases and objects (Kelly, 2017). Individuals make sense of the world through this system, form cognitive representations, and reorganize them (Berzonsky, 2004). According to the Personal Construct Theory, the personal constructs largely involve the cognitive components of implicit knowledge (Berzonsky, 2004; Jankowicz, 2004; Taber, 2013). These two constructs that form the cognitive structure are opposite of each other (Kelly, 1955, 2017). Jankowicz (2004) states that we can understand the explicit meaning meant by the individual only when we define its opposite conveyed implicitly; therefore, the opposite pole is known to reflect the implicit knowledge. According to this view, "good" makes sense only when it is compared with "bad" (Hogan & Hornecker, 2013).

The present study focused on the nature of the implicit and explicit conceptual knowledge of seventh grade students about the concept of citizen. Being a citizen is learned and developed through the socialization process within the socio-political culture in which the individual lives (Merrifield, 2001; Schulz, Fraillon, Ainley, Losito, & Kerr, 2008). Hence, in the socialization process of individuals, the way they participate in the society as citizens, the rights and responsibilities they have and how they use them affect their perceptions and conceptualization about being a citizen (Caymaz, 2007). These conceptualizations of individuals about their experiences about being a citizen could be represented as implicit and explicit knowledge in the cognitive structure.

Citizenship is a concept that has been discussed since Ancient Greece (Aristoteles and Plato) and Rome until today (Heater, 2007; Kadıoğlu, 2012; Polat Güzel, 2010). On the other hand, discussions on the concept of modern citizenship since the French Revolution have been referred with two fundamental citizenship approaches different from each other (Heater, 2007; Oldfield, 2012; Polat Güzel, 2010). These are the liberal-individualist approach and citizen-based republican approach. In the liberal approach, the individual is the person who comes before state and society, is dominant, and is morally autonomous (Oldfield, 2012; Polat Güzel, 2010). This approach involves a status-based citizenship

approach which is based on a social contract. When individuals have the citizenship status, they can freely decide whether they would use these rights provided with this status or not (Oldfield, 2012). In the liberal approach, the rights possessed by the individual come before the responsibilities. Therefore, the individual is not given any duties apart from the most fundamental citizenship duties (joining the army, participating in country defense, paying taxes, etc.) and respecting other individuals (Oldfield, 2012). In the liberal approach, the fundamental acceptance is state's being objective about the differences, individuals' understanding and respecting each other in private life, and state's treating everyone equally (Polat Güzel, 2010).

As to the citizen-based republican approach, citizenship is seen as an active participatory practice (Merrifield, 2001; Oldfield, 2012). The notion of citizenship in practice advocates active participation in political and also social tasks for the goodness and welfare of society (Merrifield, 2001). This approach, which places state and society before the individual and prioritizes social benefits rather than individual interests, sees the way of being a good and virtuous citizen as being active, political participant and placing common benefits before individual interests (Polat Güzel, 2010). As long as individuals perform the duties and responsibilities given to them by state in order to protect their political identity and common interests, they can become citizens or remain as citizens (Oldfield, 2012). Polat Güzel (2010) states that these two approaches are criticized by the radical democratic citizenship and feminist citizenship approaches in terms of the views put forward about rights, responsibilities, equality, and citizenship participation.

These two citizenship approaches that are different from each other in terms of the fundamental thoughts they asserted also shaped the curriculum and practices of nation states about citizenship education (Caymaz, 2007; Kadıoğlu, 2012; Üstel, 2016). States give schools the duty of raising citizens in line with the understanding they accept through curricula in order to protect their constitutional existence and political systems (Heater, 2007; Üstel, 2016). However, knowledge, skills, dispositions and attitudes about being citizens and citizenship are not merely learned through explicit instruction at school; they are also learned through the experiences in the social, cultural and political value systems in which the individual lives (Fischman & Haas, 2012; Lawy & Biesta, 2006; Schulz, Ainley, Fraillon, Kerr, & Losito, 2010). Council of Europe (2010) stated that both formal and informal education play an important role in teaching the principles of citizenship education and realizing its goals. Students experience the results of the social, economic, cultural, political and demographic changes directly or indirectly, and these experiences affect their not only conscious but also nonconscious ways of thinking (Fischman & Haas, 2012). Therefore, it could be stated that students' cognitive structures about the concept of citizenship are affected by the explicit knowledge in the course books as well as the experiences in the socio-cultural and political environments (social environment, family, friend groups, social institutions) and represented in mind implicitly (Biesta & Lawy, 2006; Fischman & Haas, 2012; Merrifield, 2001). Fischman and Haas (2012), stated that a citizenship education program would not be effective when implicit cognition is ignored; and it is necessary to investigate the relationship among democracy, education and citizenship in terms of implicit cognition in order to develop a more comprehensive understanding about citizenship education. Hence, nonconscious thinking ways can be stated to be as effective as the knowledge learned through curricula in the formation of students' cognitive structures about being citizens.

Students should learn the fundamental concepts about citizenship completely and correctly, and without making mistakes so that they can acquire the knowledge, skills, attitudes and behaviours targeted in the citizenship education (Yılmaz, 2013). However, studies conducted in Turkey (Bal & Akış, 2010; Faiz & Ergin, 2014; Kartal & Turan, 2015; Sabancı, 2008; Yılmaz, 2013) showed that when students explained the concept of citizen or citizenship, they had difficulties, made mistakes, or focused on only one attribute of the concept. Taber (2014) states that alternative conceptions about scientific concepts are associated with implicit knowledge because individuals do not always organize meanings and decisions about real world experiences by using conscious processes. They could also do so by using nonconscious processes, and they can access the meanings they created by using nonconscious

processes (p. 136). Campbell and Chin (2006) stated that students' misconceptions could be explained more accurately with the knowledge obtained from the theoretical foundations about implicit cognition. Implicit knowledge is related to individuals' cognitive representations forming their cognitive structure (Taber, 2013, 2014), and because they contain individuals' perceptions, beliefs, and intuitions, they could be right or wrong, or they could be different from the conceptual knowledge in the field (Akbulut Taş, 2016). Given the role of implicit knowledge in concept learning, uncovering students' implicit cognitive structures about being a citizen is considered to be important in the acquisition of the knowledge, values, and behavioral patterns about citizenship. In addition, uncovering students' implicit understanding is considered important for correctly reconstructing the relationships between the concepts or information about generalizations (Barba, 1995).

Studies in Turkey generally investigated students' misconceptions about the concept of citizenship (Bal & Akış, 2010; Faiz & Ergin, 2014; Kartal & Turan, 2015; Sabancı, 2008; Yılmaz, 2013); perceptions and views about the concept of citizenship (Akar & Keser Aschenberger, 2016; Alabaş, 2010; Doğanay & Sarı, 2009; Güven, 2010; Kılınç & Dere, 2013; Öcal, 2011; Tonga, 2013; Utku, 2015; Yılmaz, 2009) and the role of extra program in citizenship education (Keser, Akar, & Yıldırım, 2011). As for other countries, studies were found to have investigated students' citizenship values (O'Mahony, 2009), perceptions about citizenship and good citizens (Martin & Chiodo, 2007; O'Brien & Smith, 2011), and conceptual knowledge and skills about citizenship education (Zhang, Torney Purta, & Barber, 2012). The most comprehensive study at international level was the citizenship education study (CIVED) conducted by the International Association for the Evaluation of Educational Achievement (IEA) (Schulz & Sibberns, 2004). CIVED, which was first conducted in 1971 and repeated in 1999, measured the conceptual knowledge, interpretation skills, attitudes and citizenship actions of secondary school students aged 14 and over (Schulz & Sibberns, 2004). Similarly, an international citizenship education study following IEA (The International Civic and Citizenship Study [ICCS]) investigated the conceptual knowledge and attitudes of students aged 14 and over about citizen and citizenship (Schulz et al., 2008). While studies conducted in recent years have drawn attention to the importance of implicit cognition and implicit knowledge in citizenship education (Chareka & Sears, 2006; Fischman & Haas, 2012; Merrifield, 2001), there is only a limited number of studies that investigated the importance of implicit knowledge. In fact, an investigation of the nature of the implicit knowledge that could be owned by students about being a citizen in terms of students' effective citizenship education might contribute to the investigation and discussion of citizenship education in terms of implicit knowledge. As stated by Brown, Collins, and Duguid (1989), most of our learning is situational and implicit. Therefore, teachers should first be aware of what their implicit knowledge about being citizens is and what structures they have in order to enrich students' learning about being citizens. Identification of students' implicit understanding about being citizens might be beneficial in terms of the activities they would fulfill within the scope of learning-teaching activities and reviewing the messages they would give. Moreover, formation of conceptual knowledge is fundamentally implicit (Hampton, 1999), and implicit knowledge forms base for explicit knowledge (Sun, 2001; Taber, 2014). On the other hand, implicit knowledge and explicit knowledge might not be compatible and consistent with each other in all circumstances (Sun, 2001; Taber, 2014). Hence, exploration of students' implicit conceptual knowledge about being citizens might help to represent explicit knowledge in mind in an appropriate way. Then identification of students' explicit and implicit knowledge could also be necessary and important in terms of curriculum so that students can form the appropriate mental representations about being citizens.

Studies show that students' learning productions about citizens and citizenship are affected by the learning-teaching experiences at school as well as the practices in socio-cultural, political environments out of school, and students' socio-cultural background (Fischman & Haas, 2012; Lawy & Biesta, 2006; Schulz et al., 2008, 2010). The variables in the studies on the concept of citizenship in Turkey include gender (Arslan, 2014; Baştürk, 2011; Kılınç & Dere, 2013; Öcal, 2011; Özden, 2011; Sabancı, 2008; Tonga, 2013; Utku, 2015; Yılmaz, 2013), parents' education level (Arslan, 2014; Öcal, 2011; Özden, 2011; Tonga, 2013), family income and socio-economic level (Arslan, 2014; Baştürk, 2011; Öcal, 2011; Özden, 2011; Sabancı, 2008; Tonga, 2013; Utku, 2015), parents' occupation (Tonga, 2013), location and type of

school (Arslan, 2014; Kılınç & Dere, 2013; Özden, 2011; Sabancı, 2008), mother language (Arslan, 2014), the language spoken at home with family (Arslan, 2014), having friends with different cultural characteristics (Arslan, 2014), class level (Özden, 2011; Utku, 2015), and place of living (Öcal, 2011). The present study used students' gender, place of school, mother language, the language spoken at home with family, and having friends with different cultural characteristics as the fundamental variables in order to investigate explicit conceptual knowledge.

From time to time, citizenship education in Turkey was given under the name of an independent course in the curriculum or in the social studies course curriculum, and sometimes with an interdisciplinary approach (Eurydice, 2017; Şen, 2019). The "Citizenship and Human Rights" course included in the curriculum in our country in 1995 was removed in the revised curriculum in 2005, and citizenship education was included in the social studies curriculum (Şen, 2019), and it was placed as "Human Rights and Citizenship intermediary Discipline" in the primary and secondary school curriculum (Ministry of National Education [MoNE], 2015). It is reported that a more legal and egalitarian citizenship understanding came into prominence in course books in this period within the scope of the initiations for European Union membership (Şen, 2019). A new course "Citizenship and Democracy Education" was included in the secondary school curriculum in 2010 and prioritized thoughts such as human rights, democracy, equality, and cultural diversity, but this course was removed again in the curriculum in 2012 (Şen, 2019). Since the 2015-2016 education year, it was included in the curriculum as a compulsory course with the name of "Human Rights, Citizenship, and Democracy" in the 4th year primary school program, and the course is still given with the same name (MoNE, 2015). The purpose of this course is reported as teaching students the fundamental values related to human rights, citizenship, and democracy together with the conceptual knowledge related to citizenship (MoNE, 2015). It is emphasized that the course was formed using a conceptual framework that takes human as the base through "*right to live and bodily integrity, right, freedom, responsibility, justice, equality, consensus, citizenship, living together, respect for diversity and superiority of law*" (MoNE, 2018). Citizenship education was included in the "Active Citizenship" learning domain again in the Social Studies Curriculum, and dealt with an interdisciplinary approach (MoNE, 2018). This curriculum includes a total number of 18 attainments about the active citizenship learning domain, with 4 attainments in the 4th, 5th and 7th grade each, and 6 attainments in the 6th grade. The curriculum similarly included the core values about human rights and citizenship such as *"justice, independence, peace, equality, freedom, respect, responsibility, and patriotism".* In addition, within the scope of the "Turkish Qualifications Framework", the relationship of citizenship education with other curricula was established under the name of "*Social and Citizenship-related Qualifications"* (MoNE, 2018).

Based on the explanations above, the main purpose of this study is to identify secondary school seventh grade students' implicit and explicit conceptual knowledge about the concept of citizen. In line with this purpose, the study sought answers to the questions indicated below.

Research Questions:

1. What are the personal constructs used by students about the concept of citizen?

   1a. How far are the students' central elements [me as a citizen-actual self, what kind of a citizen do I want to be?-ideal self, Me as a citizen compared to other people in my environment"-social self, "What kind of a citizen do I have to be?-normative self] located to each other?

2. What are the students' explicit knowledge test scores?

   2a. Do students' explicit knowledge test scores demonstrate any significant differences according to gender, location of their school, education level of the mother and father, mother language, having friends with different cultural characteristics, and the languages spoken in the family?

Method

Research Design

The study adopted a convergent parallel mixed method. Convergent parallel mixed method is a mixed method research that enables to use and integrate qualitative and quantitative data collection methods and analyses in order to analyze the research problems comprehensively (Creswell, 2016). In this design, the researcher collects both data collection types within the same time period, integrates the findings while interpreting the general results, and explains and examines inconsistent or conflicting data in a more detailed way (Creswell, 2016). The Repertory Grid Technique (RGT), which was used for the identification of implicit knowledge in this study, is an interview technique that enables both qualitative and quantitative data analysis (Jankowicz, 2004). Hence, the data collected from the students through RGT in this study were analyzed both qualitatively and quantitatively. In addition, quantitative analysis was performed for the data collected from the Explicit Knowledge Test administered right after RGT, and since the findings were interpreted together, the study utilized convergent parallel method.

Study Group

The participants were selected using simple random sampling among secondary school seventh grade students who were enrolled in three state schools in Nusaybin, Mardin. In simple random sampling, "each unit in the target population has the equal and independent chance to be selected" (Balcı, 2010, p.92). Initially, three schools that were given permission for research by the District Directorate of National Education were identified. Two of these schools were in central town, and one of them was in a village (the first researcher has been working in this school for 4 years). The two schools in the central town had six 7th grade classrooms, and the school in the village had four 7th grade classrooms. The Explicit Knowledge Test was administered to 170 students who were enrolled in 7th grade and were present in the class that day. However, 46 students who did not answer most of the questions in the test were excluded from the study group; hence, the study involved 124 students.

For the identification of the students' implicit knowledge, 27 out of 124 students who volunteered to participate in the study and who had their parents' consent to participate in the study were selected using typical case sampling method, one of the purposeful sampling methods. "A typical sample is selected in order to reflect an ordinary person, case or phenomenon under study" (Merriam, 2013, p.77). This study involved the students who were considered to represent the group, volunteered to participate in the study, and had parent consent among the students who lived in the same region and in a similar socio-cultural environment with a view to finding out the implicit knowledge of 7th grade students about the concept of citizen. Initially, 30 students were administered RGT; as during the practice three students stated that they did not want to go on, RGT was performed with 27 students. Tan and Hunter (2002) state that as RGT is an idiographic technique in nature, a sample composed of 15 to 25 participants is considered to be sufficient. As the knowledge, skills, and values about being citizens and citizenship qualifications are taught to primary and secondary school students from 4th to 7th grade, secondary school students are considered to have conceptual knowledge about the concept of citizen. Moreover, parallel to Piaget's abstract operation stage of cognitive development, individuals in this age group are expected to understand abstract concepts, develop various ideas, values, and beliefs and become interested in the structure, policy, and culture of the society they live in (Senemoğlu, 2007). Therefore, 7th grade students were considered as the participants of this study as they are believed to have acquired conceptual knowledge about the concept of citizen, and to have mental wisdom to make sense of the practices related to citizenship in a political environment.

Frequency and percentage distribution of the personal characteristics of 124 students who participated in the study are given in Table 1.

According to Table 1, of the 124 participating students, 74 were female and 50 were male, 72 were enrolled in schools in towns, and 52 were enrolled in schools in the village. An analysis of father's education level indicated that 5 students' fathers were illiterate, 42 students' fathers graduated from primary school, 37 students' fathers graduated from secondary school, 30 students' fathers graduated

from high school, and 10 students' fathers graduated from university. An analysis of mother's education level showed that 41 students' mothers were illiterate, 29 students' mothers graduated from primary school, 38 students' mothers graduated from secondary school, 15 students' mothers graduated from high school, and 1 student's mother graduated from university. According to Table 1, of all the students, 32 indicated their mother language as Turkish and 92 as Kurdish. Frequency of speaking the mother language was indicated as *always* by 66 students, *frequently* by 39 students, and *sometimes* by 19 students. In addition, 19 students spoke Turkish at home with their family, 65 students spoke Kurdish, 40 students spoke more than one language at home (Turkish-Kurdish). Finally, 52 students had friends with different cultural characteristics while 72 did not.

Table 1. Frequency and Percentage Distribution of Participants' Personal Information Variables

Location of their school	**f**	**%**
Central town	72	58.1
Village	52	41.9
Gender		
Female	74	59.7
Male	50	40.3
Education level of the father		
Illiterate	5	4.0
Primary school graduate	42	33.9
Secondary school graduate	37	29.8
High school graduate	30	24.2
University graduate	10	8.1
Education level of the mother		
Illiterate	41	33.1
Primary school graduate	29	23.4
Secondary school graduate	38	30.6
High school graduate	15	12.1
University graduate	1	0.8
Mother language		
Turkish	32	25.8
Kurdish	92	74.2
Frequency of speaking the mother language		
Always	66	53.2
Frequently	39	31.5
Sometimes	19	15.3
Languages spoken at home with family		
Turkish	19	15.3
Kurdish	65	52.4
Multiple languages (Turkish-Kurdish)	40	32.3
Having friends with different cultural characteristics		
Yes	52	41.9
No	72	58.1

Data Collection Tools and Development

Data were collected using the Socio-demographic Form prepared by the researchers, Explicit Knowledge Test, and RGT Form. The definition of the concept of citizen in the literature (Akbulut Taş, 2010; Aybay & Özbek, 2015; Doğan, 2007; Polat Güzel, 2010, 2011; Topuzkanamış, 2013) was utilized for the formation of categories in content analysis, preparation of the Explicit Knowledge Concept Test questions, and formation of the holistic rubric. This study defined citizens as "real people who have responsibilities for state, benefit from the rights provided by state, and have sense of belonging to state".

The Socio-demographic Form

The Socio-demographic form was prepared by the researchers in order to collect data about the socio-demographic features of the participants. The form included questions about the participating students' gender, location of their school, education level of the mother and father, mother language (the language acquired by individuals from their mother, family, and social environment in a natural way, the language they used best (Oruç, 2016), the language spoken at home with family (the language commonly used by family members and other people in the environment in daily communication), having friends with different cultural characteristics, and sources of obtaining information about the concept of citizen.

Repertory Grid Technique (RGT)

Repertory Grid Technique (RGT) developed by Kelly with a view to exploring psychiatric patients' cognitive structure (Grice, 2002) in time began to be used in various studies with a view to revealing implicit knowledge (Björklund, 2008; Hemmecke & Stary, 2004; Herbig & Büssing, 2004; Hogan & Hornecker, 2013; McCloughlin & Matthews, 2017; Parsons, Graham, & Honess, 1983; Rozenszajn & Yarden, 2014, 2015; Tofan, Galster, & Avgeriou, 2011). RGT is an interview technique that enables to elicit how individuals construct their experiences about a case, object, or individual in mind and how they express these constructs, and is composed of four components as topic, elements, constructs and ratings (Jankowicz, 2004). Topic is anything related to the constructs given meaning by individuals in a specific discourse. Shortly, it is the problem to be investigated. Element (item) is the examples, cases, incidents, people or objects in a specific topic (Easterby Smith, 1980; Jankowicz, 2004). Elements could be given to the individuals directly, or they might be provided by the researcher. *Constructs*, as mentioned before, are the dimensions that are used for explaining the intuitions and perceptions that guide an action and for distinguishing and evaluating the elements (Björklund, 2008). *Constructs* are the participants' interpretations about the elements (Easterby Smith, 1980). *Rating* is the table that demonstrates the connections between the personal constructs and elements (Aztekin, 2012; Jankowicz, 2004).

Based on the studies that utilized RGT in order to elicit implicit knowledge (Björklund, 2008; Hemmecke & Stary, 2004; Rozenszajn & Yarden, 2014, 2015), the present study used RGT as follows:

1. **Explaining the Topic:** The topic of the study is seventh grade students' implicit knowledge about being citizen.

2. **Identifying the Elements:** The elements were identified with two instructors who held PhD degree and were specialized in RGT as well as implicit knowledge and explicit knowledge. Based on the research topic, the present study identified eight elements about being a citizen: "Me as a citizen-actual self, "What kind of a citizen do I want to be?-ideal self", "Me as a citizen compared to other people in my environment"-social self, "What kind of a citizen do I have to be?-normative self", "To me, an ideal citizen", "To me, a non-ideal citizen", "A good citizen I know", and "A bad citizen I know". Each of the eight elements identified was written on the cards separately. Based on Kelly's theory (1955), the first four elements were identified as the central (core) elements. Since the central elements used for

explaining the individual's self-identity are the elements that have direct effects on the formation of the individual's personal construct system and represent the individual's cognitive construct (Berzonsky, 2004; Çağlayan, 2015; Fransella, Bell, & Bannister, 2004; Schoeneich & Klapp, 1998; Ugazio & Castiglioni, 1998), they are defined as the central (core) elements in this study. Accordingly, while the actual self element represents how the individual perceives himself, the ideal self element represents how the individual wants to be in the future (Schoeneich & Klapp, 1998). According to Jankowicz (2004, p. 57), "actual self and ideal self elements are the core elements that give individuals the opportunity to express their desires and thoughts about future". Social self represents the individual's perceptions about how the people around see him/her. Social self represents the idea that the formation of an individual's personal structure is indicated by the practices in the socialization process (Ugazio & Castiglioni, 1998). As for normative self, it represents how individuals perceive themselves in terms of complying with the expectations, values and rules indicated by the people around them Berzonsky (2004). Each of the eight elements identified within the scope of this study was written on the cards separately.

3. **Eliciting the Cognitive Constructs:** Elicitation of the constructs is based on the comparative questions. Triad method is the comparison of three elements according to its similarities and differences in order to reveal the construct. The feature that expresses the similarity in the two elements out of three is recorded as the construct (Rozenszajn & Yarden, 2015). However, as the students participating in this study were young (aged 12-13), paired-card system was used because it was thought they might have difficulties in finding the adjectives or features and expressing them. At this stage, an empty repertory grid form was prepared, and the elements were written on the form. The form had two poles called difference (contrast) and similarity. Each student was asked to choose two cards. The students were clearly asked to indicate the feature that distinguished one card from the other and to indicate the feature and the opposite of the feature (difference). For instance, a student who withdrew two cards that had "me as a citizen" and "a good citizen I know" elements written on them was asked to indicate what kind of a similarity s/he found between these two elements. The student indicated a feature like "someone who is helpful". The features expressed by the student verbally were simultaneously written down on the related column by the first author of the research. This procedure was repeated by each student for each element card. As this study included eight elements, one student produced eight cognitive structures. Totally 216 cognitive structures were elicited from 27 students.

4. **Ranking of the Constructs**: The elements are ranked according to the constructs elicited at this stage. The present study utilized a 5-point ranking scale. Once the elicitation process was completed, the elements and the constructs produced by the participants were written on the empty RGT form. The form included numbers written from 1 to 5 on the top of the paper, and the participants were asked to rank the constructs related to each element between 1 and 5. Appendix 1 demonstrates the ranking of the elements in the repertory grid that belonged to the participant coded S1.

5. **Analyzing and Interpreting the Data:** Once the ranking procedure was completed by the participants, the data were analyzed using content analysis and Idiogrid 2.4 program (Grice, 2008).

Explicit Knowledge Concept Test

In this research, a concept test was prepared by the researchers in line with the expert opinions in order to identify students' explicit knowledge about the concept of citizen. This test included open-ended questions that aimed to obtain information about the definition of the citizen, its critical attributes, variable attributes, examples, and non-examples. Expert opinions of two instructors who had doctorate degree from the department of Curriculum and Instruction; one instructor who graduated from the department of political sciences, had master's degree from the department of Curriculum and Instruction and instructed courses such as citizenship and human rights in the department of Social

Sciences teaching; and 10 social studies teachers who worked in schools in Ministry of National Education. The questions that were prepared based on the critical attributes of the concept of citizen (Akbulut Taş, 2010; Aybay & Özbek, 2015; Doğan, 2007; Polat Güzel, 2010, 2011; Topuzkanamış, 2013) were presented to expert opinions. The experts were asked to review the questions in terms of clarity and comprehensibility, appropriateness to class level, having features such as producing the same answer, and having relationships with each other and to write down their opinions. The test formed in the first phase had 8 questions. As the experts reported that two of the questions could produce the same answers, the number of questions was reduced to 7. In addition, as it was also reported that some question statements (*Can you give three non-examples for the concept of citizen? Please indicate shortly why you chose them as non-examples*) might be difficult for students to understand, these questions were changed (as *Can you give examples for the people who are not citizens of a country*). The final test involved open-ended questions that contained basic information about the definition of the concept of citizen, its critical attributes, its variable attributes, examples, and non-examples) (Coşkun, 2011; Martorella, 1986). The explicit knowledge test was composed of 7 open-ended questions as *"Can you define the concept of citizen?, What comes to your mind when you hear the concept of citizen?, What are the features that should be owned by a citizen?, What are the rights owned by a citizen?, What are the responsibilities of a citizen?, Can you give examples for the people who are citizens of a country?, "Can you give examples for the people who are not citizens of a country?"*

Data Collection Process

This study was conducted with students who were enrolled in three state schools in Nusaybin, Mardin in the 2016-2017 education year. The study first utilized RGT in order to find out the students' implicit knowledge about being a citizen. The students were then administered the Explicit Knowledge Concept Test. The Explicit Knowledge Concept Test was administered to 7th grade students who were present at schools at that day after RGT was completed.

Initially, the data collection process involved obtaining official permission from the District National Education Directorate, and pre-interviews (about the purpose of the study and the parent consent form) were conducted with the students in the schools from which the permissions were obtained. Appointments were taken from the students who had the permission to participate in the study. Before the actual study, RGT was piloted with three students. After the pilot study, 30 students were administered RGT (in available hours, available classrooms, libraries or the director assistant's room, individually). However, as three students left the practice stating that they did not want to continue during the interview, interviews were continued with 27 students. Interviews took about 30 minutes. Once the administration of RGT ended, the participants were asked to read the constructs they indicated and confirm them. Then the features mentioned by the participants were written on the RGT form, and the students were asked to rank them. When RGT was completed, 124 students including the 27 students were administered the explicit knowledge concept test under the supervision of their course teacher and the first researcher. The students were told that the test was administered in order to identify their knowledge about the concept of citizen, that it was important to answer all the questions, and that their answers would not be scored. The application of RGT and Explicit Knowledge Test was conducted by the first author of the research.

Data Analysis

The constructs elicited through RGT was recorded in computer, which enabled to obtain raw data. The constructs were analyzed using content analysis methods (Jankowicz, 2004). For content analysis, 216 constructs produced by the students were written and presented in the tables. The constructs were analyzed by two researchers separately based on the conceptual basis of the concept of citizenship. The constructs produced were categorized by two coders under the categories of "good

person", "roles and responsibilities", "sense of belonging to state" "rights" "individual features" "citizenship based on nation understanding", "bad person", "unwanted behaviour". At this stage, 23 constructs were placed in different categories by the raters, which were reviewed by the coders again. This review showed that there were constructs that had similar or same meanings, and some categories (for example good person-bad person) overlapped with each other. The results of this review enabled to reach a consensus on conceptualizing the constructs under five categories that included *(being a good person, an individual who has duties and responsibilities, an individual loyal to state, an individual who has rights, and an individual who has positive personal features).* As there were few constructs in some categories, agreement coefficient was not calculated for each category separately. Agreement between the coders was calculated (193/193+23 X 100 = 89%) using the formula suggested by Miles and Huberman (1994, p.64) (Reliability= agreement/agreement+disagreement X 100). According to Miles and Huberman, agreement between the coders should be in the range of 90%. As the value obtained in this study was close to 90%, it is possible to say that there was consistency between the coders. Then the constructs produced by the students were entered in the Idiogrid 2.4 program (Grice, 2008) one by one. Eigenvalue (Euclidean distance coefficient) between the "central elements" were calculated for 27 students (*Me as a citizen-actual self and What kind of a citizen do I want to be-Ideal self?, Me as a citizen compared to other people in my environment-social self and, What kind of a citizen do I have to be?-normative self*).

The answers given to the concept test were scored by the researchers using a holistic rubric. The rubric was prepared in order to enable the researchers to clearly see the criteria while they are scoring students' answers and to make an objective scoring of for each criterion. The rubric was sent for the approval of three experts who held master's and doctorate degree in the department of Curriculum and Instruction. The rubric was revised in line with the feedback obtained from them. The holistic rubric indicated 4 achievement levels and five criteria. First level, 5 to 9 points: *Knowledge about the concept is insufficient*. Second level, 10 to 14 points: K*nowledge about the concept is partially sufficient*. Third level, 15 to 19 points: *Knowledge about the concept is mostly sufficient*. Fourth level, 20 points: *Knowledge about the concept is sufficient*. Accordingly, the lowest score the student can receive is 5, and the score of a student who responds correctly according to all criteria is 20. The rubric developed is presented in Appendix 2. 25 randomly chosen tests were scored by two researchers and a social studies teacher independently by using a rubric. Agreement between the three raters was calculated using Kendall's correlation coefficient. The coefficient obtained was found to be statistically correlated (W^a: .922, $p<0.01$) (Can, 2013).

Data obtained from the concept test was analyzed using SPSS 24.00 package programming. Significance level was taken .05 for the interpretation of the findings. Frequency and percentage distributions of the scores obtained from the test were calculated. Independent groups t-test was performed to identify whether there were any significant differences between gender, location of the school, mother language, and having friends with different cultural characteristics; and one-way ANOVA was performed in order to identify any significant differences between education level of the mother and father and the languages spoken at home variables. Normality of the distribution was analyzed for one-way ANOVA. Normality of the data was identified using mode (9.00), median (8.00) and arithmetic mean (8.45) values and histogram graph (Büyüköztürk, 2007). Levene F test was used in order to check homogeneity of the groups for one-way ANOVA analysis. Scheffe Post Hoc Test was used to find out which groups indicated differences. The study also performed effect size (eta-squared, η2) value to find out how much the independent variable had effects on dependent variables. Büyüköztürk (2007, p.48) stated that "eta-squared ranged between 0.00 and 1.00, and effect size values of 01, .06 and .14 were interpreted as "little" "medium" and wide" respectively".

Results

Results about the Seventh Grade Students' Implicit Knowledge about the Concept of Citizen

216 constructs were obtained from 27 students in order to find out seventh grade students' implicit knowledge about the concept of citizen; the constructs were collected under five categories that included, "*a good person*", *"an individual who has duties and responsibilities*", *"an individual loyal to country", "an individual who has rights", and "an individual who has positive personal features", and* the results are given in Table 2.

An analysis of the cognitive constructs produced by 27 students in Table 2 shows that 107 (49.5%) cognitive constructs were in the "a good person" category, 69 (31.9%) cognitive constructs were in the "an individual who has duties and responsibilities" category, 22 (10.1%) cognitive constructs were in the "an individual loyal to country" category, 8 (3.7%) cognitive constructs were in the "an individual who has rights" category, and 10 (4.6%) cognitive constructs were in the "an individual who has positive personal features" category.

The most frequently mentioned constructs with the same number of mentions in the "a good person" category included "is helpful/helps people in times of difficulties" (f:13) and "respects people" (f:13). The most frequently mentioned constructs in the "an individual who has duties and responsibilities" category included "is sensitive to the environment/does not harm his environment / prevents pollution" (f:20). The most frequently mentioned constructs in the "an individual loyal to his country" category included "protects his country/does not betray his country/is sensitive to his country / does not start war to his country" (f:9). The most frequently mentioned construct in the "an individual who has rights" category included "knows his rights" (f:5). The most frequently mentioned construct in the "an individual who has positive personal features" category included "adapts to his environment" (f:2) and *"can distinguish between good and bad behaviours"* (f: 2).

Table 2. Frequency and Percentage Distributions of the Categories of Seventh Grade Students' Cognitive Constructs in relation to the Concept of Citizen

Categories	Cognitive Constructs Consulted	f	(%)
A good person	Is helpful/helps people in times of difficulties	13	
	Respects people	13	
	Treats people well/does not harm/does not break hearts	10	
	Is fair-treats fairly/treats people equally/does not distinguish between people	8	
	Can show empathy	7	
	Is tolerant/understanding	6	
	Treats people honestly/does not tell a lie/advocates the truth	6	
	Is reliable	5	
	Is not hypocrite/behaves sincerely/approaches amicably/is not evil-minded /shows himself as he is	5	
	Is not selfish/is sensitive towards people/gives importance to people	4	
	has good communication with people	3	
	Is beneficial to society/contribute to people with the things s/he does	3	
	Shows people the right way/becomes a model to people around with his behaviours	3	
	Demonstrates good behaviours/does not demonstrate wrong behaviours/does not skip school	3	
	Reconciles people/makes people happy / collaborate with people	3	
	Loves animals	2	

Table 2. Continued

Categories	Cognitive Constructs Consulted	f	(%)
A good person	Loves his friends/loves people	2	
	Does not bully/does not harm children	2	
	Avoids things harmful to health/does not have bad habits	2	
	Is with his family	1	
	Is not prejudiced	1	
	Avoids negative things in human relationships	1	
	Warns the person who makes mistakes	1	
	Listens to students	1	
	Does not treat people around badly	1	
	Does not harm others' belongings	1	
Total		**107**	**(49.5)**
An individual who has duties and responsibilities	Is sensitive to the environment /does not harm the environment /Prevents pollution	20	
	Knows his responsibilities /fulfills his responsibilities	13	
	Is aware of the citizenship duties/does his duties/does right things	12	
	Obeys the law	8	
	Does not discriminate by ethnicity, language and race/respects diversity/respects the languages spoken	7	
	Does not harm the nature	7	
	Respects political view differences	1	
	Pays taxes to his country	1	
Total		**69**	**(31.9)**
An individual loyal to his country	Protects his country/is sensitive to his country/does not betray his country/does not start war to his country	**9**	
	Loves his country/homeland	7	
	Puts valuable things to his country/serves/does his job well/	4	
	Has developed sense of nationalism	1	
	Knows the history of his country	1	
Total		**22**	**(10.1)**
An individual who has rights	Knows his rights	5	
	Objects to the wrong things happening in his environment/does not remain silent about bad events	2	
	Does not interfere with people's private life	1	
Total		**8**	**(3.7)**
An individual who has positive personal features	Knows where and how to behave/adapts to the environment	2	
	Distinguishes between good and bad behaviours	2	
	Can express himself	1	
	Is self-confident	1	
	Is a hardworking person	1	
	Keeps his balance about the events	1	
	Follows his goals	1	
	Does educational activities to develop himself	1	
Total		**10**	**(4.6)**
General Total		**216**	**(100)**

Findings about how far Seventh Grade Students Positioned the Central elements to each other?

Table 3 presents results in relation to how far seventh grade students positioned the central elements to each other (Euclidean Distance) (Me as a citizen–actual self and What kind of a citizen do I want to be?-Ideal self; "Me as a citizen compared to other people in my environment"-social self, "What kind of a citizen do I have to be?-normative self").

Eigenvalue (Euclidean coefficient) between "actual self and ideal self, social self, normative self" gives clues about the individual's self-value of being a citizen Higher Euclidean coefficient (eigenvalue of >1.07) indicates low self-value of the individual. Values between 0.68 and 1.07 (0.68 <eigenvalue coefficient <1.07) indicates medium level eigenvalue; lower values (eigenvalue coefficient <0.68) indicate high self-value (Çağlayan, 2015). Euclidean coefficient that showed the distance between "actual self" and "ideal self, social self, normative self" elements for 27 students was lower than 0.68 in this study, which indicates the participants' high citizen perceptions; values between 0.68 and 1.07 indicate medium level perceptions and values over 1.07 indicate low level perceptions about being citizens.

An analysis of Table 3 in line with this explanation shows that the self-value that reflected the relationship between "actual me" and "ideal me" elements in relation to being a citizen was high; only four students (S3, S7, S13, S27) were found to have "medium" self-value; and the Euclidean distance coefficient that reflected the relationship between two elements was found 0.41. The value obtained shows that majority of the students see themselves close to the citizen they perceive as ideal. It was also found that 26 out of 27 students had high self-value that reflected the relationship between "actual self" and "social self"; only S7 was found to have medium self-value and the Euclidean distance coefficient that reflected the relationship between two elements was found 0.34. This value suggests that the students had positive self-perceptions about being citizens according to the views of other people in their environment.

As it is seen in Table 3, 25 students had high self-value that reflected the relationship between "actual self" and "normative self"; only S3 and S7 were found to have medium value, and the mean value was found 0.40. This finding suggests that majority of the students associated the norms accepted in society about being citizens with themselves closely; only two students seemed to associate the social norms with themselves at a medium level.

Table 3. Euclidean Distance Coefficients between "Me as a Citizen" and "What Kind of a Citizen Do I Want to Be?", "Me as a Citizen Compared to Other People in My Environment", and "What Kind of a Citizen Do I Have to Be" Central Elements

Participants No	**Euclidean Distance Coefficient between Central Elements**		
	Actual self-Ideal self	Actual self -Social self	Actual self-Normative self
S1	0.31	0.34	0.21
S2	0.37	0.34	0.37
S3	**1.06**	0.53	**0.92**
S4	0.14	0.14	0.14
S5	0.17	0.00	0.00
S6	0.15	0.36	0.34
S7	**0.88**	**0.71**	**0.82**
S8	0.61	0.57	0.64
S9	0.49	0.39	0.48
S10	0.14	0.20	0.22
S11	0.54	0.43	0.62
S12	0.42	0.41	0.42
S13	**0.81**	0.37	0.50

Table 3. Continued

Participants No	Euclidean Distance Coefficient between Central Elements		
	Actual self-Ideal self	Actual self -Social self	Actual self-Normative self
S14	0.22	0.21	0.64
S15	0.64	0.40	0.59
S16	0.32	0.25	0.32
S17	**0.73**	0.25	0.44
S18	0.34	0.20	0.34
S19	0.19	0.19	0.19
S20	0.37	0.29	0.41
S21	0.34	0.51	0.28
S22	0.29	0.32	0.28
S23	0.16	0.23	0.25
S24	0.16	0.16	0.16
S25	0.29	0.39	0.14
S26	0.58	0.56	0.58
S27	0.33	0.33	0.58
Mean	**0.41**	**0.34**	**0.40**

Results about the Seventh Grade Students' Explicit Knowledge about the Concept of Citizen

Results about the Students' Explicit Knowledge Test Scores

Frequency and percentage distributions of the students' explicit knowledge test scores about the concept of citizen are given in Table 4.

Table 4 shows that 95 (76.6%) of the participating students had "insufficient" knowledge about the concept of citizenship, 29 (23.3%) had "partially sufficient" knowledge.

Table 4. Frequency and Percentage Distributions of the Students' Explicit Knowledge Test Scores about the Concept of Citizen

Levels	Points	f	%
First level	5	2	1.6
	6	13	10.5
	7	23	18.5
	8	25	20.2
	9	32	25.8
	Total	**95**	**76.6**
Second level	10	18	14.5
	11	4	3.2
	12	4	3.2
	13	3	2.4
	Total	**29**	**23.3**
	General Total	**124**	**100.0**

Result about the Comparison of Students' Explicit Knowledge Test Scores according to Independent Variables in Research

Table 5 demonstrates the findings of the independent groups t-test performed in order to find out whether the students' explicit knowledge test scores displayed significant differences according to

gender, location of their school, education level of the mother and father, mother language, having friends with different cultural characteristics, and the languages spoken at home. Table 6 and 7 demonstrate the findings of the one-way ANOVA analysis which was performed in order to find out whether the scores displayed significant differences according to education level of the mother and father and the languages spoken with family at home.

Table 5. Independent Groups t-test Results about the Students' Concept Tests Scores according to Gender, Location of Their School, Mother Language, and Having Friends with Different Cultural Characteristics

Variables		N	$\overline{X}$	Sd	sd	t	η2	p
Gender	Female	74	8.32	1.72	122	1.027	0.00	.306
	Male	50	8.64	1.61				
Location of their school	Town	72	8.51	1.85	122	.506	0.00	.614
	Village	52	8.36	1.41				
Mother language	Turkish	32	8.90	1.74	122	1.794	0.02	.075
	Kurdish	92	8.29	1.63				
Having friends with different cultural characteristics	Yes	52	8.86	1.81	122	2.376	0.04	.019
	No	72	8.15	1.51				

Table 5 shows that the students' Explicit Knowledge Test scores did not display significant differences according to gender ($t_{(122)}$= 1.027, p> .05, η2=0.00), location of the school ($t_{(122)}$ =.506, p> .05, η2=0.00) and mother language ($t_{(122)}$= 1.794, p> .05, η2=0.02). On the other hand, having friends with different cultural characteristics indicated significant differences ($t_{(122)}$ = 2.376, p< .05, η2=0.04). It was found that having friends with different cultural characteristics had low level of effect on students' Explicit Knowledge Test scores. Accordingly, this variable was found to explain 4% of the changes in the scores obtained from the Explicit Knowledge Test and had a quite little effect size in explaining the significant difference found between the students' total scores.

Table 6. Means and Standard Deviation Values of the Students' Explicit Knowledge Test Scores according to Education Level of the Mother and Father and the Languages Spoken at Home

Variables		N	$\overline{X}$	S
Education level of the father	Illiterate	5	7.20	0.83
	Primary school graduate	42	8.16	1.66
	Secondary school graduate	37	8.35	1.65
	High school graduate	30	9.00	1.61
	University graduate	10	9.00	1.88
Education level of the mother*	Illiterate	41	7.90	1.39
	Primary school graduate	29	8.34	1.81
	Secondary school graduate	38	9.13	1.64
	High school graduate	16	8.43	1.75
Languages spoken at home	Turkish	19	9.52	1.50
	Kurdish	65	8.01	1.43
	Multiple language (Turkish and Kurdish)	40	8.65	1.88

*As only one participant's mother graduated from university, high school and university graduates were combined in the same group so that analysis could be performed.

An analysis of Table 6 indicates that mean score of the students whose father graduated from high school ($\overline{x}$:9.00) and university ($\overline{x}$:9.00) was higher than the mean score of the students whose father was illiterate ($\overline{x}$:7.20), whose father graduated from primary school ($\overline{x}$:8.16) and secondary school ($\overline{x}$:8.35). Mean score of the students whose mother graduated from secondary school ($\overline{x}$:9.13) was higher than the mean score of the students whose mother was illiterate ($\overline{x}$:7.90), who graduated from primary school ($\overline{x}$:8.34) and who graduated from high school ($\overline{x}$:8.43). As it is seen in Table 6, mean score of the students who spoke Turkish at home with their family ($\overline{x}$:9.52) was higher than the mean score of the students who spoke Kurdish ($\overline{x}$:8.01) and who spoke multiple languages (Turkish and Kurdish) ($\overline{x}$:8.65) at home.

An analysis of Table 7 shows that students' scores according to father's education level indicated no significant differences [$F_{(4-119)} = 2.177$, $p>.05$, $\eta2=0.07$]. Significant differences were found between the explicit knowledge test scores according to mother's education level [$F_{(3-120)} = 3.826$, $p<.05$]. Scheffe test results performed in order to find out which groups caused differences showed that the mean score of students whose mother graduated from secondary school ($\overline{x}$:9.13) was significantly higher than the mean score of the students whose mothers were illiterate ($\overline{x}$:7.90) (SS>ILL). Effect size value showed that mother's education level had medium level effect on the students' explicit knowledge test scores ($\eta2=0.09$). Hence, mother's education level was found to explain 9% of the changes of the scores obtained from the Explicit Knowledge Test and had medium effect size in explaining the significant difference found between the students' total scores.

Table 7 also indicates that there was a significant difference between the students' explicit knowledge test scores according to the languages spoken at home [$F_{(2-121)} = 6.985$, $p< .05$]. Scheffe test results performed to find out which groups caused the differences showed that mean score of the students who spoke Turkish ($\overline{x}$:9.52) was higher than the mean score of the students who spoke Kurdish ($\overline{x}$:8.01) or more than one language ($\overline{x}$:8.65) in the family. Effect size value showed that the languages spoken at home had medium level effect on students' scores ($\eta2=0.10$). Hence, the language spoken at home was found to explain 10% of the changes in the scores obtained from the Explicit Knowledge Test and had medium effect size in explaining the significant difference found between the students' total scores.

Table 7. One-way ANOVA Results of the Students' Explicit Knowledge Test Scores according to Education Level of the Mother and Father and the Languages Spoken at Home

Variables	Source of Variance	Sum of Squares	Sd	Average of Squares	F	η2	p	Scheffe
Education Level of the Father	Between Groups	23.644	4	5.911	2.177	0.07	.076	-
	Within Groups	323.066	119	2.715				
	Total	346.710	123					
Education Level of the Mother	Between Groups	30.269	3	10.090	3.826	0.09	.012	OM>OYO*
	Within Groups	316.441	120	2.637				
	Total	346.710	123					
Spoken at Home	Between Groups	35.888	2	17.944	6.985	0.10	.001	T>K*
	Within Groups	310.821	121	2.569				
	Total	346.710	123					

Discussion, Conclusion and Suggestions

This study investigated seventh grade students' implicit and explicit knowledge about the concept of citizen. An analysis of the students' constructs that reflected their implicit knowledge about the concept of citizen showed that the students interpreted the concept of citizen firstly as "a good person" and secondarily as "an individual who has duties and responsibilities". Students' seeing the citizen mainly as a good person might result from the reasons such as the emphasis on the importance of being a good person in the education process and in the socio-cultural environments and higher attention paid by society to being a good person. In fact, students' perceiving and interpreting being a citizen as a good person reflects a view extending from Ottoman Empire to today with the second constitutionalist period (Polat Güzel, 2011; Üstel, 2016). As clearly stated by Üstel (2016), desirable citizen of the constitutionalism is the product of a model that gains meaning with "good and bad" attitudes and behaviours. Virtuous citizens who are raised well mentally, psychologically and physically were regarded as the assurance of both public morals and Constitutional Monarchy Regime. Kadıoğlu (2012) also stated that through the integration of national identity, the connection between a good person and a good citizen established a close association between being a good citizen and being respectful to national interests and values. It could be stated that the construct of "good person-good citizen" has continued in Turkey until today. Therefore, the present study could indicate that the implicit constructs that reflect the relationship between being a citizen and "a good person" are acquired from the messages given at home, in social life, and in education institutions. Alabaş (2010) reported that fourth year students' perceptions about being a good citizen reflected the characteristics of a good person and stated that the students could have gained this understanding through the values indicated in the social studies course books. Martin and Chiodo (2007) also reported that compared to 11th grade students, 8th grade students defined citizenship as being good and focused more on civil engagement than political engagement (serving the public, helping others, etc.). Being a good person is related to character education. The literature includes studies emphasizing that citizenship education and character education are similar and complementary to each other (Hoge, 2002; Sılay, 2014). Önal, Öztürk, and Kenan (2018) investigated also the citizenship education in England and reported that the nature of the citizenship education changed into a civics or character education course that highlighted moral and national character. According to Davies, Gorard, and McGuinn (2005), there could be overlapping sides of citizenship education and character education, but the original meanings of citizenship and character education should be preserved. Because a good person and a good citizen are different from each other (Heater, 2007; Touraine, 2002). According to Touraine (2002), a citizen is different from a regular person, and one can be a good citizen without having the values required for being a good person. Therefore, citizens should have good character, yet in addition to having good character, being a good citizen requires adopting political, social, cultural and economic rights for a democratic society.

The second category that reflected students' constructs about being a citizen was "an individual who has duties and responsibilities". This finding might result from the fact that there is more emphasis on students' duties and responsibilities as a student or as an individual in comparison to their rights as a citizen. In addition, as the participating students are still young, they might not be aware of the responsibilities of state to its citizens. Üstel (2016) stated that in the process of The Second Constitutional era to date, the type of desired citizen differed in the curriculum based on the political climate and that citizenship education emphasized sense of belonging to state and citizenship duties and responsibilities rather than the rights. In a similar vein, Kadıoğlu (2012) emphasized that citizenship in Turkey adopts an understanding based on responsibilities rather than rights and lacks the liberal-individualist aspect of the concept of citizenship. The study conducted by Akar and Keser Aschenberger (2016) using the CIVED's questionnaire reported that in comparison to international results, students in Turkey had traditional citizenship perceptions and the responses of students clearly reflected the "raising generations that are secular, democratic, and respectful to national values" goal of the Turkish Republic. This study also found that students mentioned the citizenship duties and responsibilities more than the

rights, which indicates that citizen-based republican approach is dominant in citizenship education. In the citizen-based republican approach, a citizen is seen as an individual who participates actively and takes actions based on the citizenship duties and responsibilities (Kadıoğlu, 2012; Oldfield, 2012; Polat Güzel, 2010). On the other hand, Oldfield (2012) states that citizens should be strengthened, appropriate institutional environments should be provided, and individuals should be taught their citizenship duties starting from childhood so that active political and social participation of the citizen can be realized. Implicit constructs stated by the students in this study in the "a good person" and "an individual with roles and responsibilities" categories overlapped with the characteristics of personally responsible citizen proposed by Westheimer and Kahne (2009). A personally responsible citizen is defined with his duties and responsibilities and good person characteristics. Westheimer and Kahne state that while schools and education policies in America weaken the efforts to raise participatory citizens and justice-oriented citizens, they support to raise personally responsible citizens.

Of the 27 students who were administered RGT, 23 were found to perceive the citizen they are (actual self) very close to the citizen they want to be (ideal self); 26 were found to have positive perceptions about self according to the viewpoints of the people around (social self), and 25 highly associated the social values, expectations about being citizens in the socio-cultural environment they lived in with themselves (normative self). Results showed that the majority of the students perceived being a citizen as being a good person, which indicates that the students had high eigenvalues. As majority of the participating students perceived being a citizen as being a good person rather than a member of state, it is possible that they have high self-values. Things that play an active role in the acquisition of implicit knowledge include the experiences shared by individuals in their environment (mother, father, relatives, friends, teachers and older students), observations about others' roles and behaviours, things learned from master-apprentice relationship, and socially shared values and knowledge (Brown et al., 1989; Nonaka, 1994; Nonaka & Toyama, 2003; Silby & Watts, 2015). Hence, in the socio-cultural environment they lived in, the students might have been implicitly taught the characteristics of being a good person (honesty, truth, tolerance, and helpfulness) as the characteristics to be possessed by a good citizen. This implicit connection between a good citizen and a good person was reported in the related literature, and generally a good citizen and a good person were considered to be equal to each other (Osborne, 2004; Sears & Hughes, 2006). Students' implicit knowledge about being a citizen is line with the studies that revealed misconceptions about the concept of citizen (Bal & Akış, 2010; Kartal & Turan, 2015; Yılmaz, 2009, 2013). For instance, Bal and Akış (2010) reported that students' explanations about the concept of citizen contained misconceptions, and they defined the citizen by distinguishing between a good person /bad person. Results of the present study showed that the students' implicit knowledge about being citizens partly overlapped with explicit conceptual knowledge but did not seem to reflect a holistic conceptualization. An analysis of the students' constructs that reflected their implicit knowledge showed that they talked very little about their rights as citizens. On the other hand, in the explicit knowledge test they wrote more about their rights as citizens. For example, in the explicit knowledge test the students indicated human rights and citizenship rights given in the Social Studies course books (such as *right to live, right to education, right to health, right to security, voting, right to elect and be elected, freedom, security of domicile, right to privacy)*. Hence, the students were found to know the names of these rights mentioned in the course books, but due to their age they might not perceive themselves as citizens who have these rights. Individuals' implicit knowledge might not be consistent with scientific information or could involve alternative understanding. As to explicit knowledge, it is constructed on implicit knowledge (Taber, 2014). Therefore, the importance of students' implicit knowledge should be highlighted both in the instruction of the concept of citizen and course book designs, and in the activities that aim to teach citizenship values and understanding and awareness of being citizens.

According to the students' scores in the explicit knowledge concept test, majority of the students had first level (insufficient) and second level (partially sufficient) explicit knowledge about the concept of citizen. An analysis of the students' answers in the explicit knowledge test showed that majority of the students paid attention to only one of the critical attributes of the concept while explaining the

concept of citizen; they could not define the concept of citizen, and they could not express critical attributes of the concept correctly. For instance, "Could you please define the concept of citizen?" and "What comes to your mind when you hear the concept of citizen?" questions were answered by the students very shortly; their answers included "a person living in a country", "individuals of a country" "an individual who fulfills his responsibilities", "I think of sensitive people", "I think of people", and "People belonging to same state". These findings suggest that students' constructs about the concept of citizen were insufficient in terms of an active citizen with democratic participation, and they did not have a holistic feature. Language factor might be of importance in students' insufficient or partially sufficient knowledge about the concept of citizen. As the city where the study was conducted included different languages, the students might have difficulties in understanding what they read and expressing themselves. Öcal (2011) reported that views about civil rights displayed significant differences according to the place of living. This case was also mentioned by the teachers in the study conducted by Arslan (2014). Teachers stated that as their students did not understand some fundamental concepts, they experienced problems in education and instruction, and these problems had negative effects on students' success.

No significant differences were found in the students' concept test scores according to gender. This finding was different from the results of the previous studies. Previous studies reported that female students had higher and more positive perceptions about citizenship rights and consciousness in comparison to male students (Arslan, 2014; Öcal, 2011; Özbek, 2004; Tonga, 2013). No significant differences were found in the students' concept test scores according to the location of the school. In the region where the study was conducted, students who do not have a school in their village are taken to the schools in nearest villages or central towns through transportation, which enables students in the farthest villages to attend school. This case might be associated with the nonsignificant difference in the explicit knowledge concept scores according to the type of school. However, the study conducted by Conover and Searing (2000) reported that the students who lived in city, suburban areas, and rural communities interpreted being a citizen differently (as cited in Martin & Chiodo, 2007). Conover and Searing asked students "What comes to your mind first when you hear the word citizen?". Nearly 60 % of the students living in suburban areas and cities defined citizen as "a person who has legal rights" while majority of the students in rural communities defined citizen as "a member of society" (as cited in Martin & Chiodo, 2007)

The students' explicit knowledge concept test scores did not demonstrate significant differences according to father's education level; on the other hand, in terms of mother's education level, there was a significant difference between the students whose mothers were illiterate and the students whose mother graduated from secondary school in favor of the students whose mother graduated from secondary school. As it is reported in the related literature (Kaya, 2006; Özbek, 2004), mothers are more effective in their children's education. As the participating students' fathers worked in other cities, they came home at certain intervals. Therefore, it could be said that the mothers took more responsibilities in their children's education. The study conducted by Tonga (2013) reported that students' knowledge about citizenship consciousness increased with the increase in the education level of their father and mother.

The results indicated no significant differences in the explicit knowledge concept test scores according to mother language. This difference might have been caused by the similar experiences and information acquired at school despite the differences in mother languages. In addition, children might not be using their mother tongue at home. The study conducted by Arslan (2014) also found no significant differences in students'' multicultural *citizenship perceptions* in terms of "mother language /ethnicity"; however, multicultural awareness scores demonstrated significant differences according to mother languages, namely in favor of students speaking Turkish in comparison to those speaking Kurdish or Arabic. In this study, students' explicit knowledge concept test scores indicated significant differences according to the language spoken at home; this difference was found to be between the students speaking Turkish and the students speaking Kurdish and in favor of the students speaking

Turkish. Some of the participating students might be speaking Turkish at home although their mother language is Kurdish. Therefore, students who spoke Turkish at home might have expressed their thoughts in the Explicit Knowledge Test better than the students who spoke only Kurdish. This result could be related to the socio-cultural structure of the place where the students lived. Some of the students participating in the study lived in villages and they received mobile teaching. Majority of these students spoke Kurdish. An analysis of the students' knowledge sources about the concept of citizen indicated that they benefitted mainly from conversations in the family and books (course books); on the other hand, they did not seem to benefit much from discussion programs, newspapers and magazines. According to the first researcher's observations, the students used Turkish in a limited environment (mainly schools). It was also observed while administering the RGT that students who stated their mother language as Kurdish had more difficulties in producing adjectives about the identified elements. Hence, the students might have had difficulties in expressing their understanding about the concept of citizen in a written form and in Turkish because the language not only reflects or represents the concepts but also shapes the concept formation (Wood, 2003). Students' concept test mean scores were found to demonstrate significant differences in terms of having different cultural features, and this difference was found to have medium effect. This result overlaps with the results reported by Arslan (2014). Arslan reported that there was significant difference in students' *citizenship perceptions* score in terms of "having a friend from another culture", and this difference was found to be in favor of the students who had friends from another culture. Hence, communicating with individuals from different cultures in term of ethnicity/cultural structures in societies with multiple cultures could be considered to have positive effects on the conceptual understanding about the concept of citizen as well.

In conclusion seventh grade students' implicit knowledge about the concept of citizenship mainly reflected the features of a good person; being a citizen was perceived mainly as duties and responsibilities rather than citizenship rights; moreover, the students perceived themselves close to the ideal citizen they want to be, they had positive perceptions about themselves in terms of complying with social values and expectations according to the viewpoints of the people in their environment, and they had high self-perceptions (eigenvalue) about being citizens. On the other hand, implicit cognitive structures about being a citizen are limited with the data obtained from only 27 students and do not aim to make generalizations. Majority of the students were found to have insufficient and limited knowledge about the concept of citizen, or they focused on only one critical attributes of the concept (duties and responsibilities), and students' explicit knowledge demonstrated significant differences in terms of the language spoken at home, having friends with different characteristics, and mother's education level. The significant differences detected in this study according to students' Explicit Knowledge Test scores in terms of the mother language the language spoken at home with family, having friends with different cultural characteristics, and mother's education level are limited with the results obtained from only 124 students and with the demographic characteristics of the socio-cultural environment where the study was conducted.

The following recommendations were made in line with the results of the study

- This study found that students' implicit cognitive structures about being a citizen reflected the characteristics of a "good person" and responsibilities rather than rights. Being a citizen becomes meaningful in the context of rights and responsibilities. Therefore, citizenship education could focus on the rights as well as the responsibilities one has as a citizen and how to use these rights; attention could be drawn to the differences between the features of a good person and good citizen.
- The results of the present study showed that the majority of the students had first level knowledge according to the Explicit Knowledge Test. Hence, students could be provided with accurate and sufficient knowledge about the definition of the concept of citizen and its critical attributes, variable attributes, examples and non-examples.
- This study was conducted with seventh grade students. It could be conducted with students from other grade levels as well. The role of informal learning experiences could also be

investigated in the formation of students' implicit knowledge about the concept of citizenship. The present study included only students' views. Teachers' views about their own roles in forming students' implicit knowledge could also be elicited. In addition, new studies to be conducted might investigate the implicit cognitive structures of the students who received high and low scores from the explicit knowledge test in a comparative manner. This study investigated the effects of variables such as mother language languages spoken at home with family, having friends with different cultural characteristics, and parents' education level on explicit knowledge. Implicit knowledge of students from different levels about being a citizen could be investigated considering similar variables.

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References

Akar, H., & Keser Aschenberger, F. (2016). Students' civic knowledge and perceptions of civic concepts in a private school: A comparative international perspective. *International Journal of Curriculum and Instructional Studies* (*IJOCIS*), *6*(12), 115-132.

Akbulut Taş, M. (2010). *Kavram ve genelleme yapısının doğrudan öğretiminin ve örtük olarak öğrenilmesinin sınıflama ve açıklama davranışına, sınıflama ve açıklama davranışının kalıcılığına ve transfere etkisi* (Unpublished doctoral dissertation). Çukurova University, Adana.

Akbulut Taş, M. (2016). The place of implicit knowledge and implicit learning in construction of expertise in pre-service teacher education. In Ö. Demirel, & A. Doğanay (Eds.), *Proceedings of the Third International Congress on Curriculum and Instruction: Curriculum Studies in Higher Education* (pp. 240-256), Ankara.

Alabaş, R. (2010). Primary school students' conceptions of citizenship. *Procedia Social and Behavioral Sciences, 2*, 2528-2532.

Arslan, S. (2014). *Çokkültürlü toplumlarda vatandaşlık eğitimine yönelik öğretmen ve öğrenci düşüncelerinin incelenmesi* (Unpublished doctoral dissertation). Marmara University, İstanbul.

Aybay, R., & Özbek, N. (2015). *Vatandaşlık hukuku* (4th ed.). İstanbul: İstanbul Bilgi Üniversitesi Yayınları.

Aztekin, S. (2012). Determining the understandings about the limit subject in mathematics by using repertory grid technique. *International Online Journal of Educational Sciences*, *4*(3), 659-671.

Bal, M. S., & Akış, A. (2010). Sosyal bilgiler dersi "insanlar ve yönetim" ünitesinde karşılaşılan kavram yanılgıları. *E- Journal of New World Sciences Academy Education Sciences, 5*(4), 2061-2070.

Balcı, A. (2010). *Sosyal bilimlerde araştırma* (8th ed.). Ankara: Pegem Akademi Yayınları.

Barba, R. H. (1995). *Children's tacit and explicit understandings of dinosaurs*. Retrieved from ERIC databases (ED388510).

Baştürk, N. (2011). *İlköğretim 8. sınıf vatandaşlık ve demokrasi eğitimi dersi öğretim programı kazanımlarının öğrenci görüşlerine göre değerlendirilmesi (Konya İli örneği)* (Unpublished master's thesis). Atatürk University, Erzurum.

Berzonsky, M. D. (2004). Identity processing style, self-construction, and personal epistemic assumptions: A social-cognitive perspective. *European Journal of Developmental Psychology, 1*(4), 303-315. doi:10.1080/17405620444000120

Biesta, G., & Lawy, R. (2006). From teaching citizenship to learning democracy: Overcoming individualism in research, policy and practice. *Cambridge Journal of Education*, *36*(1), 63-79.

Björklund, L. (2008). The repertory grid technique: Making tacit knowledge explicit: Assessing creative work and problem solving skills. In H. Middleton (Ed.), *Researching technology education: Methods and techniques* (pp. 46-69). Rotterdam: Sense Publishers. Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-69231

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, *18*(1), 32-42.

Büyüköztürk, Ş. (2007). *Sosyal bilimler için veri analizi el kitabı* (8th ed.). Ankara: Pegem Akademi Yayınları.

Campbell, G., & Chin, S. (2006). *The fit of the implicit cognition paradigm to science education research: An exploratory analysis.* Retrieved from http://csjarchive.cogsci.rpi.edu/proceedings/2006/docs/p136.pdf

Can, A. (2013). *SPSS ile bilimsel araştırma sürecinde nicel veri analizi* (1st ed.). Ankara: Pegem Akademi Yayınları.

Caymaz, B. (2007). *Türkiye'de vatandaşlık resmi ideoloji ve yansımaları*. İstanbul: İstanbul Bilgi Üniversitesi Yayınları, No:156.

Chareka, O., & Sears, A. (2006). Civic duty: Young people's conceptions of voting as a means of political participation. *Canadian Journal of Education*, *29*(2), 521-540.

Coşkun, M. (2011). *Kavram öğretimi.* Adana: Karahan Kitabevi.

Council of Europe. (2010). *Charter on education for democratic citizenship and human rights education recommendation cm/rec (2010)7 and explanatory memorandum*. Strasbourg: Council of Europe Publishing. Retrieved from https://www.coe.int/en/web/edc/charter-on-education-for-democratic-citizenship-and-human-rights-education

Creswell, J. W. (2016). Araştırma yaklaşımının seçimi. In M. Bütün & S. B. Demir (Trans. Ed.), *Araştırma deseni nitel, nicel ve karma yöntem yaklaşımları* (4th ed., pp. 3-23). Ankara: Eğiten Kitap.

Çağlayan, E. (2015). *Ergenlerin öz kimlik grafiklerinin aile işlevselliği açısından değerlendirilmesi: Bir idiyografik çalışma* (Unpublished master's thesis). Çukurova University, Adana.

Davies, I., Gorard, S., & McGuinn, N. (2005). Citizenship education and character education: Similarities and contrasts. *British Journal of Educational Studies*, *53*(3), 341-358.

De Jong, T., & Ferguson Hessler, M. G. M. (1996). Types and qualities of knowledge. *Educational Psychologist*, *3*(12), 105-113.

Doğan, O. (2007). *İlköğretim 5.sınıf sosyal bilgiler dersi "bir ülke bir bayrak" ünitesindeki kavramların öğrenilmesinin bazı değişkenler açısından incelenmesi* (Unpublished master's thesis). Çukurova University, Adana.

Doğanay, A., & Sarı, M. (2009). Lise öğrencilerinin vatandaşlık algılarına etki eden faktörlerin analizi. In A. Şişman, İ. Acun, C. Balkır, C. Yücel, H. Busher, T. Lawson, C. Wilkins, …, H. Ermiş (Eds.), *I. Uluslararası Avrupa Birliği, Demokrasi, Vatandaşlık ve Vatandaşlık Eğitimi Sempozyumu* (pp. 36-51). Uşak Üniversitesi Avrupa Birliği Eğitim, Araştırma ve Uygulama Merkezi, Uşak.

Easterby Smith, M. (1980). The design analysis and interpretation of repertory grids. *International Journal of Man-Machine Studies, 13,* 3-24.

Ellis, R. (2005). Measuring implicit and explicit knowledge of a second language: A psychometric study. *Studies in Second Language Acquisition*, *27,* 141-172.

European Commission/EACEA/Eurydice. (2017). *Citizenship education at school in Europe-2017*. Eurydice Report. Luxembourg: Publications Office of the European Union. Retrieved from http://ec.europa.eu/eurydice

Faiz, M., & Ergin, E. (2014). 8th grade students' understanding level and misconceptions about key concepts of citizenship (Sample of Kastamonu). *Procedia Social and Behavioral Sciences, 143*, 669-673.

Fischman, G. E., & Haas, E. (2012). Beyond idealized citizenship education: Embodied cognition, metaphors, and democracy. *Review of Research in Education*, *36,* 169-196.

Fransella, F., Bell, R., & Bannister, D. (2004). *A manual for repertory grid technique* (2nd ed.). Chichester, UK: John Wiley & Sons.

Grice, J. W. (2002). Idiogrid: Software of the management and analysis of repertory grids. *Behavior Research Methods Instruments & Computers*, *34*(3), 338-341.

Grice, J. W. (2008). *Idiogrid software: Idiographic analysis with repertory grids*. Retrieved from http://www.idiogrid.com

Güven, S. (2010). *İlköğretim birinci kademede vatandaşlık eğitimi üzerine bir durum çalışması* (Unpublished doctoral dissertation). Gazi University, Ankara.

Hampton, J. A. (1999). Implicit and explicit knowledge: One representational medium or many? *Behavioral and Brain Sciences*, *22*(5).

Heater, D. (2007). *Yurttaşlığın kısa tarihi* (1st ed.). (M. Delikara Üst, Trans.) Ankara: İmge Kitabevi.

Hemmecke, J., & Stary, C. (2004). *A framework for the externalization of tacit knowledge embedding repertory grids.* Retrieved from http://www.bibsonomy.org/bibtex/.../jeahex

Herbig, B., & Büssing, B. (2004). The role of explicit and implicit knowledge in work performance. *Psychology Science*, *46*(4), 408-432.

Hogan, T., & Hornecker, E. (2013). Blending the repertory grid technique with focus groups to reveal rich design relevant insight. In *Proceedings of the 6th International Conference on Designing Pleasurable Products and Interfaces* (pp. 116-125)..

Hoge, J. D. (2002). Character education, citizenship education, and the social studies. *The Social Studies*, *93*(3), 103-108. doi:10.1080/00377990209599891

Jankowicz, D. (2004). *The easy guide to repertory grids.* Chichester, UK: John Wiley & Sons.

Jonassen, D. H. (2006). On the role of concepts in learning and instructional design. *Educational Technology Research and Development*, *54*(2), 177-196.

Kadıoğlu, A. (2012). *Vatandaşlığın dönüşümü: Üyelikten haklara* (2nd ed.). İstanbul: Metis Yayınları.

Kartal, A., & Turan, İ. (2015). İlköğretim 5. sınıf öğrencilerinin zihin haritalarında vatandaşlık bilgileri ile ilgili kavram yanılgıları. *The Journal of Academic Social Science Studies*, *34*, 373-383.

Kaya, M. (2006). *8. sınıf öğrencilerinin vatandaşlık bilinci düzeylerinin çeşitli değişkenler açısından değerlendirilmesi* (Unpublished master's thesis). Gazi University, Ankara.

Kelly, G. A. (1955). *The psychology of personal constructs* (Vol II). New York: Norton. (Reprinted by 1991, London: Routledge).

Kelly, G. A. (2017) A brief introduction to personal construct theory. *Costruttivismi, 4*, 3-25. doi:10.23826/2017.01.003.025.

Keser, F., Akar, H., & Yıldırım, A. (2011). The role of extracurricular activities in active citizenship education. *J. Curriculum Studies*, *43*(6), 809-837. doi:10.1080/00220272.2011.591433

Kılınç, E., & Dere, İ. (2013). Lise öğrencilerinin "iyi vatandaş" kavramı hakkındaki görüşleri. *Sosyal Bilimler Araştırmaları Dergisi*, *4*(2), 103-124.

Lawy, R., & Biesta, G. (2006) Citizenship-as-practice: The educational implications of an inclusive and relational understanding of citizenship. *British Journal of Educational Studies*, *54*(1), 34-50.

Martin, L. A., & Chiodo, J. J. (2007). Good citizenship: What students in rural schools have to say about it. *Theory and Research in Social Education*, *35*(1), 112-134.

Martorella, P. H. (1986). Teaching concepts. In J. M. Cooper (Ed.), *Classroom teaching skills* (3rd ed., pp. 182-223). Lexington, Mass: D.C. Health & Co.

McCloughlin, T. J. J., & Matthews, P. S. C. (2017). Personal constructions of biological concepts-the repertory grid approach. *Center for Educational Policy Studies Journal, 7*(1), 93-110.

Merriam, S. B. (2013). *Nitel araştırma: Desen ve uygulama için bir rehber* (3rd ed.). (S. Turan, Trans. Ed.). Ankara: Nobel Yayınları.

Merrifield, J. (2001). *Learning citizenship: Learning from experience trust*. Retrieved from http://www.participatorymethods.org/sites/participatorymethods.org/files/learning%20citizenship_merrifield.pdf

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Ministry of National Education. (2015). *İlköğretim sosyal bilgiler dersi 6-7. sınıflar öğretim programı.* Ankara: MEB Devlet Kitapları.

Ministry of National Education. (2018). *Sosyal bilgiler dersi öğretim programı (ilkokul ve ortaokul 4, 5, 6 ve 7. sınıflar).* Ankara: MEB Devlet Kitapları. Retrieved from http://mufredat.meb.gov.tr/Programlar.aspx

Murphy, G. L., & Medin, D. L. (1985). The role of theories in conceptual coherence. *Psychological Review*, *92*(3).

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science, 5*(1), 14-37.

Nonaka, I., & Toyama, R. (2003). The knowledge-creating theory revisited: Knowledge creation as a synthesizing process. *Knowledge Management Research & Practice*, *1*, 2-10. doi:10.1057/palgrave.kmrp.8500001

O'Brien, J. L., & Smith, J. M. (2011). Elementary education students' perceptions of "good" citizenship. *Journal of Social Studies Education Research*, *2*(1), 21-36.

Oldfield, A. (2012). Vatandaşlık: Doğal olmayan bir pratik mi? (C. Cemgil, Trans.). In A. Kadıoğlu (Ed.), *Vatandaşlığın dönüşümü: Üyelikten haklara* (pp. 93-106). İstanbul: Metis Yayınları.

O'Mahony, C. (2009). Understanding core democratic values and citizenship in the fifth grade. *Social Science Research and Practice*, *4*(3), 1-16.

Oruç, Ş. (2016). Türkçede ana dil ve ana dili. *Journal of Turkish Language and Literature, 2*(1), 311-322. doi:10.20322/lt.15463

Osborne, K. (2004). Political and citizenship education: Teaching for civic engagement. *Education Canada*, *45*(1), 13-16.

Öcal, A. (2011). İlköğretim yedinci sınıf öğrencilerinin vatandaşlık hakları konusundaki görüşleri. *Electronic Journal of Social Sciences*, *10*(35), 134-149.

Önal, G., Öztürk, C., & Kenan, S. (2018). Öğretmenlerin gözüyle İngiltere'de vatandaşlık eğitimi. *Education & Science*, *43*(196), 243-256. doi:10.15390/EB.2018.7060

Özbek, R. (2004). *Vatandaşlık ve insan hakları eğitimi ders amaçlarının gerçekleşme düzeyi* (Unpublished doctoral dissertation). Atatürk University, Erzurum.

Özden, D. (2011). *İlköğretim okullarında çevresel vatandaşlık eğitimi* (Unpublished doctoral dissertation). Marmara University, İstanbul.

Parsons, J. M., Graham, N., & Honess, T. (1983). A teacher's implicit model of how children learn. *British Educational Research Journal, 9*(1), 91-101.

Polat Güzel, E. (2010). *Anayasal vatandaşlık* (Unpublished doctoral dissertation). Ankara University, Ankara.

Polat Güzel, E. (2011). Osmanlıdan günümüze vatandaşlık anlayışı. *Ankara Barosu Dergisi, 3*, 128-157.

Reber, A. S. (1993). *Implicit learning and tacit knowledge: An essay on the cognitive unconscious.* Oxford: Oxford University Press.

Rozenszajn, R., & Yarden, A. (2014). Mathematics and biology teachers' tacit views of the knowledge required for teaching: Varying relationships between CK and PK. *International Journal of STEM Education, 1*(11).

Rozenszajn, R., & Yarden, A. (2015). Exposing biology teachers' tacit views about the knowledge that is required for teaching using the repertory grid technique. *Studies in Educational Evaluation, 47,* 19-27.

Sabancı, O. (2008). *İlköğretim 7. sınıf öğrencilerinin sosyal bilgiler dersinde yer alan vatandaşlık konularıyla ilgili kavramsal anlamaları* (Unpublished master's thesis). Gazi University, Ankara.

Schoeneich, F., & Klapp, B. F. (1998). Standardization of inter-element distances in repertory grid technique and its consequences for psychological interpretation of self-identity plots: An empirical study. *Journal of Constructivist Psychology, 11*(1), 49-58. doi:10.1080/10720539808404638

Schulz, W., & Sibberns, H. (Ed.). (2004). *IEA civic education study technical report*. Amsterdam, Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *Initial findings from the IEA international civic and citizenship education study*. Amsterdam, Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

Schulz, W., Fraillon, J., Ainley, J., Losito, B., & Kerr, D. (2008). *International civic and citizenship education study: Assessment framework*. Amsterdam, Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

Sears, A., & Hughes, A. (2006). Citizenship: Education or indoctrination? *Citizenship and Teacher Education, 2*(1), 3-17.

Senemoğlu, N. (2007). *Gelişim öğrenme ve öğretim*. Ankara: Gönül Yayıncılık.

Sılay, N. (2014). Another type of character education: Citizenship education. *International Journal of Education, 6*(2).

Silby, A., & Watts, M. (2015). Making the tacit explicit: Children's strategies for classroom writing. *British Educational Research Journal, 41*(5), 801-819. doi:10.1002/berj.3176

Sun, R. (2001). *Duality of mind: A bottom-up approach toward cognition*. Mahwah, NJ: Lawrance Erlbaum.

Şen, A. (2019). Vatandaşlık eğitiminde değişiklik ve süreklilikler: 2018 sosyal bilgiler öğretim programı nasıl bir vatandaşlık eğitimi öngörüyor? *Journal of Qualitative Research in Education*, *7*(1), 1-28. doi:10.14689/issn.2148-2624.1.7c1s.1m

Taber, K. S. (2013). *Modelling learners and learning in science education: Developing representations of concepts, conceptual structure and conceptual change to inform teaching and research*. Dordrecht: Springer. doi:10.1007/978-94-007-7648-7

Taber, K. S. (2014). The significance of implicit knowledge for learning and teaching chemistry. *Chemistry Education Research and Practice, 15,* 447-461.

Tan, F. B., & Hunter, M. G. (2002). The repertory grid technique: A method for the study of cognition in information systems. *Management Information Systems Quarterly*, *26*(1), 39-57.

Taylor, H. (2007). Tacit knowledge: Conceptualizations and operationalizations. *International Journal of Knowledge Management, 3*(3), 60-73.

Tofan, D., Galster, M., & Avgeriou, P. (2011). Capturing tacit architectural knowledge using the repertory grid technique (NIER track): (Nier track). In *Proceeding of the 33rd International Conference on Software Engineering - ICSE '11* (pp. 916-919). doi:s10.1145/1985793.1985944

Tonga, D. (2013). *8. sınıf öğrencilerinin vatandaşlık bilinci düzeylerinin çeşitli değişkenler açısından değerlendirilmesi* (Unpublished doctoral dissertation). Gazi University, Ankara.

Topuzkanamış, Ş. E. (2013). *Türk hukukunda anayasal gelişmeler ışığında vatandaşlık* (Unpublished doctoral dissertation). Dokuz Eylül University, İzmir.

Touraine, A. (2002). *Demokrasi nedir?* (O. Kunal, Trans.). İstanbul: Yapı Kredi Yayınları.

Ugazio, V., & Castiglioni, M. (1998). Socialization models and the construction of self. *Journal of Constructivist Psychology*, *11*(1), 3-29. doi:10.1080/10720539808404636

Utku, M. (2015). *Üniversite öğrencilerinin vatandaşlık ve sosyal medya (sosyal ağ) vatandaşlık algısının çeşitli değişkenlere göre incelenmesi* (Unpublished master's thesis). Erzincan University, Erzincan.

Üstel, F. (2016). *Makbul vatandaşın peşinde II. Meşrutiyet'ten bugüne vatandaşlık eğitimi* (7th ed.). İstanbul: İletişim Yayınları.

Westheimer, J., & Kahne, J. (2009). What kind of citizen? The politics of educating for democracy. *American Educational Research Journal*, *41*(2), 237-269.

Wood, D. (2003). *Çocuklarda düşünme ve öğrenme* (M. Özünlü, Trans.). İstanbul: Doruk Yayınları.

Yılmaz, K. (2009). İlköğretim 8. sınıf öğrencilerinin temel vatandaşlık kavramlarına ilişkin algıları. In A. Şişman, İ. Acun, C. Balkır, C. Yücel, H. Busher, T. Lawson, C. Wilkins, …, H. Ermiş (Eds.), *I. Uluslararası Avrupa Birliği, Demokrasi, Vatandaşlık ve Vatandaşlık Eğitimi Sempozyumu* (pp. 291-297). Uşak Üniversitesi Avrupa Birliği Eğitim, Araştırma ve Uygulama Merkezi, Uşak.

Yılmaz, K. (2013). İlköğretim öğrencilerinin vatandaşlık eğitimi ile ilgili temel kavramlara ilişkin algılarının incelenmesi. *Hacettepe University Journal of Education*, *28*(1), 453-463.

Zhang, T., Torney Purta, J., & Barber, C. (2012). Students' conceptual knowledge and process skills in civic education: Identifying cognitive profiles and classroom correlates. *Theory & Research in Social Education*, *40,* 1-34. doi:10.1080/00933104.2012.649467

Ziori, E., & Dienes, Z. (2008). How does prior knowledge affect implicit and explicit concept learning? *The Quarterly Journal of Experimental Psychology*, *61*(4), 601-624.

Appendix 1. Ranking of the Constructs elicited in the Repertory Grid Technique Form administered to the students according to the Elements Original RGID belong to S1

1 2 3 4 5

Negative	**1. Me as a citizen**	**2. What kind of a citizen do I want to be?**	**3. Me as a citizen compared to other people in my environment environment...**	**4. What kind of a citizen do I have to be?**	**5. To me, an ideal citizen**	**6. To me, a non-ideal citizen**	**7. A good citizen I know**	**8. A bad citizen I know**	**Positive**
Does not respect the languages spoken	5	5	5	5	5	1	4	1	respects languages spoken
is not understanding	5	5	4	5	5	1	5	1	is understanding
does not respect ethnicity	5	5	4	5	5	1	5	1	respects ethnicity
is not sensitive to the environment	5	4	5	5	5	2	5	1	is sensitive to the environment
does not fulfill his responsibilities	4	5	4	5	5	1	5	1	fulfills his responsibilities
does not fulfill the duties of citizenship	5	5	4	5	5	2	5	1	fulfills the duties of citizenship
is not helpful to people	4	5	5	5	5	2	5	1	is helpful to people
does not love his country	5	4	4	5	5	2	5	1	loves his country

Appendix 2. Holistic Rubric

Holistic Rubric on Explicit Knowledge about the Concept of Citizen

Criterion	Performance descriptions	Performance Levels				Achievement Point
		1 Insufficient	2 Partially Sufficient	3 Mostly Sufficient	4 Sufficient	
Definition of the concept	Citizens are real people who have responsibilities for state, benefit from the rights provided by state, and have sense of belonging to state.	It is insufficient because the definition does not include critical attributes and superordinate concepts or irrelevant definitions are expressed.	It is partially sufficient because the definition includes only a critical attribute and superordinate concept	It is mostly sufficient because two of the critical attributes are expressed, and superordinate concept is correctly stated in the definition.	It is sufficient because all the critical attributes and the superordinate concept are expressed correctly in the definition.	
Critical attributes of the concept	1. Have responsibilities for state 2. Benefit from the rights provided by state. 3 Have sense of belonging to state. 4. Real people are citizens	It is insufficient because the critical attributes of the concept are not expressed.	It is partially sufficient because one of the critical attributes of the concept is expressed.	It is mostly sufficient because two of the critical attributes of the concept are expressed.	It is sufficient because all the critical attributes of the concept are expressed.	
Variable attributes of the concept	1. Responsibilities of people and conditions of responsibilities may vary depending on the constitution and laws in the country where they live. 2. The rights of individuals and the conditions of benefiting from these rights may vary depending on the constitution and laws. 3. The sense of commitment to the state can be strong or weak. 4. Real people may acquire citizenship at birth or subsequently.	It is insufficient because the variable attributes of the concept are not expressed.	It is partially sufficient because one of the variable attributes of the concept is expressed.	It is mostly sufficient because two of the variable attributes of the concept are expressed.	It is sufficient because all the variable attributes of the concept are expressed.	

Appendix 2. Continued

Criterion	Performance descriptions	Performance Levels				Achievement Point
		1 Insufficient	2 Partially Sufficient	3 Mostly Sufficient	4 Sufficient	
Examples of the concept	1. Citizen of the Republic of Turkey 2. Citizen of the United States 3. Citizen of the Kingdom of Belgium	Examples of the concept are not presented or irrelevant examples are presented.	It is partially sufficient because at least one correct example is presented.	It is mostly sufficient because at least two correct examples are presented.	It is sufficient because more than two correct examples are presented.	
Non-examples of the concept	1. Immigrant 2. Minority 3. Refugee 4. Stateless	Non-examples of the concept are not presented or irrelevant examples are presented.	It is partially sufficient because at least one correct non-example is presented.	It is mostly sufficient because at least two correct non-examples are presented.	It is sufficient because more than two correct non-examples are presented.	

Achievement level	Point	Performance description
4	20	Fourth level: Sufficient
3	15-19	Third level: Mostly Sufficient
2	10-14	Second level: Partially Sufficient.
1	5-9	First level: Insufficient.