New Horizons in Educational Sciences

Turhan ÇETİN, Ergin HAMZAOĞLU, Yurdal DIKMENLİ, Bahadir KILCAN
New Horizons in Educational Sciences
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Foreword

Technology has influenced all the aspects of our lives by causing inevitable changes and improvements in every field. Naturally, the world of science has greatly benefited from this change and development. In consequence, the rapid circulation of information and technology in the scientific world has increased the cooperation among scientists. This cooperation highly contributes to researches and studies in the fields of language, history, literature, education, economy, social and cultural life, politics, sports, tourism, and media and communication along with many other areas.

Thus, this book contains *New Horizons in Educational Sciences* in parallel with the improvements in the world of science. In this context, educational sciences, classroom education, geography education, science education, environmental education, psychological guidance and counselling teacher preparation, teaching methods and approaches. It took about one year to prepare and print the book. We would like to express our deepest gratitude to our friends who contributed to this process. We also thank SRA academic publishing staff.

Finally, very special thanks go to the authors who contributed to our book with their researches. It is our greatest wish that this book will increase the cooperation among scientists to make the world a better place.

Kind Regards.

Editors

Turhan ÇETİN, Ergin HAMZAOĞLU,
Yurdal DİKМENLİ & Bahadır KILCAN

08. 10. 2019
CHAPTER 21

Social Studies and Creativity

Mustafa DOLMAZ¹ & Özge METİN²

1. What is Creativity?

Creativity came across as a concept that sought to be defined by asking questions such as what, where, when, how, why, and who; gained increasing popularity in the years following the launch of the first research under the direction of Guilford by the American Psychological Association (APA) in the 1950s. A definitive, agreed and universal definition of creativity is out of question for the present century. The fact that it caters to many fields such as business, art, technology, science and education has kept the interest constant in creativity, and that creativity is a multidimensional and complex way of thinking has caused us to come across with different definitions.

The existence of many definitions of creativity will undoubtedly help us to understand creativity correctly and clearly if it is accepted that it has different identities where different characteristics of creativity come to the fore. Some of the reached definitions are as follows:

Creativity;

- is a combination of five important variables, “sensitivity to problems in general terms, the ability to produce a vast number of ideas, openness to innovation and change, the capacity to come up with new and unconventional ideas and redefine reality”. (Guilford, 1972, pp. 279-280),
- etymologically comes from the Latin word "creare", meaning "to generate, create, give birth” (San, 2008, p.3),
- “is the ability to discover or reveal anything new, to find a new solution to a problem, to create a new method, or a new device” (Ana Brittanica, 1993),
- to create, to do something new that has never been seen before by taking advantage of intelligence, thought and imagination. (Türk Dil Kurumu, 2019),
- is the ability to try different solutions to eliminate a problem faced by an individual, to uncover original products by people who have the ability to see what other individuals with different perspectives cannot see, to approach and produce solutions to problems from different angles, to analyze and synthesize new information (İşık & Riza, 2012, p.144; Senemoğlu, 2010; Soylu, 2004).
- “to make predictions and set up hypotheses in the face of problems, to test them, to compare the results, to change and re-test these hypotheses and to transfer the results.” (Torrance, 1974),

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“the process which involves the individual's unique solution ways and process in the face of the problem, the individual's ability to include the cognitive processes in which he/she uses the elements of intelligence in terms of originality and production” (Aslan, 2001a, pp. 15-16),

“the capacity of producing new or original ideas, views, new structuring, inventions or artistic objects that person scientifically accepts” (Vernon, 1984, p. 435),

“is a skill that forms the basis of all kinds of mental, emotional, and development of human life” (Üstündağ, 2009, p. 5),

“is the ability to solve a problem faced by an individual by associating with the information obtained as a result of learning, by using this information to reveal an original product or thought” (Güleyüz, 2000, p. 165).

When looking at the definitions of creativity in general, the existence of some of the concepts that come to the fore is remarkable. Concepts such as “capacity, original thought, power, cognitive ability, process, product and point of view” actually constitute the common point of all given definitions. In order to make a common definition of creativity, researchers need to take into account the definitions that are also covered within the framework of thought currents or approaches that are outside their definitions. Accordingly;

- According to the psychoanalytic approach, creativity is the adaptation of conflict by the ego to social rules and expectations as a result of the conflict between the individual's instinctive peaks and the ego and the super-ego in situations where social expectations do not match each other (Vexliard, 1966, pp. 108-110; Aynal, Çetin, Dağlıoğlu, Elibol, İnan, Öncü, Tanju, Turağlı, Ünlüer, Zeteroğlu., 2012, pp. 27-33).

- The humanistic approach, in contrast to the psychoanalytic approach, emphasizes the self-realization of the individual by arguing that creativity is hindered in the environment of conflict and that it can arise and develop in a free environment (Aynal et al, 2012, pp.27-33; Taylor, 2009).

- The Environmental theory argues that the individual learns creativity by finding different and new ways to solve problems he or she faces as a result of qualified experiences by making environmental conditions suitable (Demirci, 2007, p.66; Doğan, 2007, p.168; Yapıcı, 2006, pp.237-239).

- The perceptual approach suggests that creativity stems from the need to be driven in line with individuals' perception capacities and to establish relationships with the outside world (Aynal et al., 2012, p.27-33; Argun, 2012, p.20).

- Gestaltists claim that instead of putting together the parts that make up the problem, bringing a different perspective on the whole problem will bring about the creative outcome (Dacey, 1999).

- In the cognitive-developmental approach, Piaget explained creativity through assimilation and adaptability, which are the ways individuals change their cognition structures to adapt to their environment, while David Fieldman explained creativity through the adaptation process (Cohen & Ambrose, 1999, pp.11-15).

- The four-stage theory explained the creativity with the Preparation in which the individual learns about the problem, the Incubation in which the original thoughts develop, the Enlightenment-Inspiration in which the solution of the problem appears unconscious, and
the Validation phases in which the effectiveness of the solution is evaluated (Aslan, 1994; Aslan, 2001b, pp.19-20; Rouquette, 2007; Sak, 2014; Onur and Zorlu, 2017, pp.1535-1540).

Based on the common characteristics revealed by various researchers and approaches, it is also possible to briefly define the concept of creativity in the form of original ideas presented against hypotheses put forward against a problem and the ability to find or reveal the new one covering the solution process.

In various studies conducted on creativity, it is concluded that creativity and creative thinking are not the same things, but are still used in place of each other and that there is misconception or confusion about this subject. While creative thinking is seen as a more intellectual process, creativity involves a number of behaviors based on both intellectuality and performance (Genç, 2011, pp.103-148; Yazçayıır, 2015, pp.191-200). In this sense, it would not be wrong to say that creativity actually includes and encompasses creative thinking.

2. The Importance of Creativity

In an age when information develops and transforms very quickly, individuals who can keep up with the pace of the social change, capable of problem-solving, concerned, curious, productive, entrepreneurial, flexible, sensitive, original, versatile and think independently, are needed. Based on various definitions of creativity, it is possible to say that it is a multidimensional concept and contains many features within it. Undoubtedly, these are the skills or characteristics that education aims to bring to the individual. With the acquisition of knowledge, skills, attitudes and values that are essential elements of educational objectives; creativity also plays a major role in the development of science (Üstündağ, 2009, p.48). In this sense, the purpose of education is to raise people who have the ability to produce new things, not to repeat what the generations before themselves did (Sungur, 1997, pp.35-41).

According to Piaget, creative individuals are individuals who do not accept everything that is going on around them as they are, who evaluate events and problems from their perspective and offer solutions (Sungur, 1997, pp.35-41). In this respect, in order for individuals to be able to grow, the educational programs need to go beyond their current ideologies and stop imposing their own rights on the individual and expand their areas of freedom. On the other hand, it is no longer discussed the importance of creativity in education, but how to develop creativity. Because when the research and explanations on creativity and problem solving are looked at, the result that creativity and problem solving are learnable skills, as long as appropriate programs are developed and implemented in appropriate environments individuals with this skill can be raised, encourage and make educators think in this regard (Karakuş, 2001, p.3). In this respect, creativity that develops through educational processes plays an important role in the advancement and development of a society in terms of producing what is not produced by using unusual means, creating what does not exist, and finding what is not discovered.

Creativity and creative thinking make the world more livable by adding new perspectives to our world. It is only possible to make inventions in social sciences and humanities and health, science and mathematics that will guide the future of humanity by revealing the creativity of mankind and using its potential. In this respect, creativity is of great importance in terms of raising individuals who develop society and realize the inventions that carry it forward. Under every innovation, invention or discovery that humanity has made from the moment of its existence, it appears that creativity exists (Öztürk, 2001, p.158).

Creativity brings about the process of adaptation to the immediate and far surroundings, as it is a power or ability that is at the core of new developments. The rapid developments that have emerged
as a result of globalization are paving the way for a faster change in the world. Such that, as a result of these rapid developments, today's younger generations will find a different social structure and world in front of them when they become adults (Öztürk, 2001, p. 159). It is obvious that creativity is needed in order to keep up with the rapidly changing and evolving environmental conditions and to overcome the many problems encountered in daily life. Because creativity is the solution to the most important problems of mankind (Guilford, 1967, pp. 279-281). Creativity, which contributes to the ability of individuals to keep up with the changing society and world over the years, also comes across as an element that triggers active and productive individuals to respond to the increasing needs of daily life.

3. Relationship between Creativity and Social Studies

While the judgment that creativity can only be found in highly qualified people was dominant in the first periods the concept of creativity emerged, as a result of the increasing work done in the field, this judgment has changed over time in the form that creativity exists in each individual but its level varies according to the person.

The ability of individuals to reveal their existing creativity and even increase it to a higher level is realized in the appropriate educational environment. According to environmental theory, creativity is the behavior learned as a result of qualified experiences. In order for the individual to be able to reveal and develop his/her existing creativity, environmental conditions need to be made suitable. Creativity is not a phenomenon or situation that exists in an instant, and it requires a process. Since it is a developable feature, individuals need to be supported and trained for this purpose in order for creative behavior to occur (Demirci, 2007, pp. 65-67; Doğan, 2007, pp. 169-180; Yapıcı, 2006, p. 4; Okutan, 2012, p. 35). Gartenhaus (1997, pp. 11-15) mentioned that creativity is present in every individual but there is a need for an adequate number of application and reinforcement activities in order to develop and use the existing potential of individuals. Creativity is ultimately an innate ability, and encouraging the individual to use it by supporting and encouraging the individual develops his/her creativity. But in the current system of order and education, very few people are encouraged and promoted to use their creativity. The social studies course offers an important infrastructure with its content rich in terms of supporting the creativity of individuals and revealing their existing potential.

Social studies is a primary education course that is formed with an interdisciplinary understanding of social sciences such as history, geography, sociology, psychology, philosophy, law, economics, political science, art, and citizenship knowledge in order to enable the individual to live in harmony with society and its environment. In the social studies course, it is possible to analyze the lifestyle, climate, nature, physical and economic conditions of that region by taking advantage of various documents in recognizing the environment, region, country and world, and by making predictions about those places. In this analysis process, it takes the creativity process to make different comparisons, to examine the causes of differences, to know what kind of information is needed, to review one-and multi-faceted views in order to produce solutions to the fundamental problems (Üstündag, 2003, pp. 1-2). Media tools such as maps, graphics, visuals, cartoons, articles, statistical information, newspapers, magazines and documentaries used in this process can be presented as clues in imagining social life. The processing of these cues by different techniques and methods may support the creativity of the individual within the scope of the social studies course and it can contribute to its development, and creativity can also provide a better understanding of the disciplines involved in its social knowledge. Here, it is possible to mention a mutual effect rather than one-way.
The new primary education programs, which were launched with pilot application in 2004-2005 and implemented throughout the country with the following 2005-2006 academic year, have the basic skills required to be acquired by the students. Social studies curriculum included in these programs, on the other hand, is based on value, skill and learning outcome. What draws the attention here are the skills that are spread throughout the program. These skills, which are the backbone of all courses are listed as critical thinking, creative thinking, communication, research-question, problem-solving, using information technologies, entrepreneurship, using Turkish correctly, effectively and beautifully (MEB, 2005 cited by Gömleksiz & Kan, 2009, p.40). Social studies curriculum, which has undergone significant changes in 2005, aims to educate “creative, flexible, entrepreneurial, self-confident, multi-faceted thinkers, productive and solution-oriented individuals in the face of problems, rather than a student who is armed with judgments by directing the student to active learning” (Ün Açığöz, 2009, pp.35-36).

While the qualifications of the citizens of the Republic of Turkey intended to be raised within the vision of the social studies curriculum are stated, the aim of raising students as citizens who are “…critical thinkers, creative…, active and productive in social life…” are emphasized and the aim of raising creative individuals is stressed directly (MEB, 2005 cited by. Turan, 2018, p. 298). In addition to the program, student workbooks are designed as a resource to improve students’ creativity (Kaymakçı, 2009, p.1542). The programs have been revised in parallel to new developments in Turkey as well as in the world, following the needs of countries and societies. The social studies curriculum, which was changed thoroughly in 2005, was updated again in 2018. Creativity, although included directly in the 2005 program among the skills given, was not included in the competence and skills in the updated Social Studies Program. Instead, creativity, which refers to the ability of the individual to transform his / her thoughts into action, has found its place in the form of problem solving, decision making and innovative thinking skills under the competence of taking initiatives and entrepreneurship, which includes the ability to plan and manage projects in order to achieve goals as well as innovation and risk-taking (MEB,2018, p.5). Looking at these given three skills, it is noted that there are features that are often highlighted in the definitions given about creativity. Decision making, problem-solving, entrepreneurship and innovative thinking, which are components of creativity, instead of being given in a single roof under the name of creativity, we come across the form of skills that are intended to be gained one by one. What needs to be noted here is that the creative thinking that the social studies course aims to develop is given as an innovative thinking skill (Cited by. Turan, 2018, p.298). In the same program, however, authenticity and creativity were listed among the fundamental expectations that teachers were expected to adopt in the evaluation department.

Divergent thinking, which is the source of creativity, has not found itself any room neither in the program in 2005 nor 2018. "Divergent thinking, however, provides many possible solutions to questions with many correct answers or without any correct answers. Divergent thinking can be used to answer complex open-ended questions of life. These questions force people to consider a variety of options and outcomes. These questions have no definite or literal answers, almost inviting people to their individual perspective in the name of evaluating the questions” (Gartenhaus, 1997, p.11-15). In this respect, it is concluded that divergent thinking should be included in the programs in which creativity is sought to be developed.

As can be seen, in the past 15 years, creativity has found itself a place in the social studies curriculum with different forms and names. This situation is directly proportional to the education system of the era. Now, the need for creative individuals who are different from others and who can think spontaneously, investigate, question, and manage to build relationships between objects and events that have never been established before has increased even further. For this reason, creativity
is important not only in the Social Studies program but also in the teaching program of other disciplines (Dolmaz, 2018).

Social studies, by their very nature, require direct use of creativity. Especially in the teaching of subjects that contain the past, such as history, and which consist of concepts not directly related to the present (Yılmaz ve Çolak, 2012, p.10); taking advantage of the ability of creativity in the teaching of abstract concepts in geography and citizenship, establishing relationships between these concepts that have not been established before, taking courses with creative methods and using materials that are the product of creative thinking in social studies course will provide great facilities for educators to achieve the objectives of the course.

The realization of a creative social studies course is directly proportional to the existence of the following elements:

- Creative Teacher
- Creative Student
- Creative Environment
- Materials Supporting Creative Skills.

These elements are directly related to each other, and in a situation where one of them is absent, the process of creative social studies course will be very difficult.

4. Creative Teacher

It is a fact that education starts in the family with the birth, that individuals who reach the school age continue their education in the school, and that this controlled education within the school program is directed by the teachers (İşik, 2013, p.587). The existence of creative individuals who think and question and produce solutions to social problems has gained importance in today's world education system and society (Demir, 2013, p.85). As with other individuals, creative teachers are essential for a generation to be creative because in order for teachers to develop creativity in students, they must first have the ability to create creativity and form a model. If teachers can think fluently and flexibly and display their authenticity, they can prepare a creative educational environment, follow the development of creative thinking in children and put forward creative work (Yenilmez & Yolcu, 2007). Teachers can teach almost any subject in a creative way, but they have a hard time doing so for two reasons. The first reason is that they don't find themselves creative and the second is the standard curriculum and textbooks (Sahlberg, 2009, p.339). In fact, the current curriculum is designed according to the constructivist approach and has the ability to be a useful learning program that makes the student active in the learning environment (Gökay & Tural, 2012, p.2). The fact that the students have taken responsibility for their own learning during the education process enables to have a well-educated, creative, complex problem solving, decision-making, effective thinking and lifelong learning individuals, but also prevents them from having stereotypes (Ün Açıkgoz, 2009, pp.35-36). This program, taking into account the child's interest and developmental characteristics, nurtures the child's creativity and allows individualized teaching. In other words, the education program was designed for creative education, however, it is also necessary for the teacher to develop activities that will enable the students in the classroom to individualize learning (Yenilmez & Yolcu: 2007, p.98). The teacher can only make the lesson more interesting, effective and enjoyable when he uses his creativity (Uçar & Dağlı, 2017, p.201; Cremin, 2009, p.36).
When it comes to social studies course, the teacher's hand is stronger than ever. The creative teaching methods and techniques used by the teacher, the creative activities and the teaching materials that support creativity are quite diverse compared to many courses and are almost limited to the imagination of the teacher. Because Social Studies is a multidisciplinary field with a wide and deep pool of subjects, which has emerged as a result of the integration of social sciences such as history, geography, politics, economics, archaeology, psychology and sociology.

İşık (2013, p.585) stated that there were a number of tasks on teachers in educating creative individuals and classified these tasks as giving the necessary preliminary skills for creativity, organizing the learning environment, organizing learning and teaching activities, determining measurement and evaluation techniques.

Preliminary skills required for creativity include motivating the student, gaining the ability to access information sources, gaining the ability to take notes and read. It is important for the student that his / her motivation is increased, that he/she can continue his / her work in patience and that he/she to show his / her creativity (İşık, 2013, p.588-591). According to Rubin (2000), the need to reach first-hand sources of information is related to the fact that thought does not emerge in emptiness. In order for thought to emerge, children need first-hand various and rich resources (Cited by, Öztürk,2007, p.25). Social sciences have first-hand rich resources.

All teachers in general and all social sciences teachers in particular, should be able to apply various methods and techniques specific to them, develop original activities, develop creative solutions to the various problems they face, and create environments that are directly proportional to the content of the course (Uçar & Dağlı, 2017, p.201).

The method-technique and learning activities that social studies teachers can often use to contribute to the development of creativity in the student are as follows;

- Case Study Method
- Problem Solving Method
- Excursion-Observation Method
- Computer-assisted Instruction Method (BDE)
- Drama / Creative Drama
- Educational Game Method
- Role-Playing
- Brainstorming
- Working with Group
- Station
- Historical Empathy
- Advertisement / Poster Preparation
- Talk About Picture
- Newspaper Publication
- Literary Product Reading
By using these methods and techniques and activities, teachers can contribute to the development of creative thinking skills in the student and develop a creativity-based education and training process.

For example, when the second unit of 7th grade social sciences courses, “Culture and Heritage” is taught, teachers can use computer-aided teaching & web-based teaching methods. Related documents on the web can be made use of. These documents can be visual, auditory, or both visual and auditory. These materials created by technological developments are also the products of creativity and are also an important factor in the development of creativity. With the use of technology, access to information has become easier and thus it has become possible for the student to add a new one to their existing knowledge and develop different perspectives. This excessive use of technology also improves the student's imagination and enables him to acquire high-level thinking skills such as creative thinking skills. Technology also contributes to the realization of extraordinary activities that cannot be done in a traditional classroom environment (Köse Biber, 2014, p.22-24).

Or, social studies teachers will be able to display first-hand resources about the subject by making field trips or museum trips during the subjects of history, geography or economics, engaging the student in a deep thinking process in the face of these resources and this attitude of the teacher will contribute to the development of constructive and creative thinking in the student. The materials seen and touched will increase the student's interest and comprehension level (Köstüklü, 2006). Museums, on the other hand, will provide students with the opportunity to make a comparison between the past and the present by embodying abstract concepts and objects between the lines of books (Çulha, 2006).

Again, brainstorming a method that nurtures creativity and can often be referred to in social studies. For example, when teaching the “Global Connections” unit of the 7th grade textbook, students may be given the opportunity to identify the causes of global problems and produce solutions to these problems by brainstorming. This free environment allows the creative thoughts of the student to emerge. Students’ nurturing from each other’s ideas and reaching ideal ideas can be achieved in this way.

It is not possible for all method-technical and educational studies to be discussed here and examined in detail, however, due to the common characteristics of these methods and techniques, educational studies allow students to present their different ideas in a free manner by making them active in the learning environment, enables the student to discover the information, instead of transferring the pure knowledge. Therefore, the imagination and creativity of the student are supported. The operation of this method-technique and studies in a healthy manner is under the supervision of the teacher.

We have previously mentioned that another task that is teachers’ part in educating creative individuals is to determine measurement and evaluation techniques. With this goal, teachers should pay attention to the following aspects for an evaluation process to improve creativity in social studies:

Teachers;

- should carry out a measurement process that includes students' imagination, intuition and predictive abilities,
- should be able to determine students' ability to reveal details,
should be encouraging students to question and research,
should reveal students' unusual, interesting and original responses,
should help students reveal the relationship and contrast between events and facts,
should lead students into creative problem-solving processes,
should encourage students to use their own authentic thoughts,
should use a method that measures not only knowledge based on memorization and remembering, but also multifaceted thinking skills,
should ensure that the education process continues through questions whose answers are not previously known (Atik, 2006, pp.78-79).

Besides, creative social sciences teachers should first grasp the necessity of being a creative individual. They should bring different materials and ideas related to the subject to be processed into the teaching environment. They should not forget that diversity and authenticity support creativity. They should accept all students as an authentic individual and encourage them to act free. They should encourage their students in the educational environment and treat all students equally (Schreglmann & Kazancı, 2016).

Motivating and encouraging the student has a positive effect on the development of creativity skills. The students' views should be welcomed indulgently and an environment for democratic cooperation should be provided (Erdoğan, 2006, p.103).

The teacher should allow his or her students to use failure as a learning opportunity, the student should have the freedom to explore, make mistakes, and take the risk of learning from his / her teachers. Students should be provided with sufficient time and necessary space for their studies. Creativity cannot be revealed by giving the student too little or too much time. For creativity, the student needs to know that he or she needs to be under a certain level of pressure and have enough time. Teachers should adopt an adventurous approach by exposing themselves to new thoughts and experiences, thereby nurture and develop themselves with new ideas (Stoll and Temperley, 2009, p.7).

5. Creative Student

The development of the child's creative thinking skills, which he/she begins to exhibit their creative skills in the family from a young age, continues during the school period (Öztürk, 2001, p.159). Ataman (1993, p.112) stated that the age 5-6 is the most critical period in the development of creativity in children, but the period in which creative products are exhibited at the highest point coincides with the period between the ages of 13-14.

Yapıcı and Yapıcı (2006) defined this period as the period in which children can think beyond time and the real world and not limit themselves to symbols belonging to real objects (Cited by. Kol, 2011, p.6). Students are introduced to social studies course in 4th-5th grades at the age of 10-11 years (Dolmaz & Kılıç, 2017, p.43). The period in question coincides with the period when the development of creativity in the student continues rapidly and is not yet at its peak. Therefore, it is important to support the creativity of the student in the social studies course and to ensure that the creativity of the individual is based on solid foundations. So, how can the development of students’ creativity skills be supported in the social studies course? How can students play a creative role in social studies?
First of all, students should be taught the value and importance of thought and the activities in which they can express their thoughts should be included in the course. Students should not feel compelled to give the same kind of answers and do the same kind of studies. It is very important for students with different ideas to express their thoughts easily in the classroom environment, in the production of original ideas and in the development of creativity (Gökalp, 2016, p.31). Social studies course is a course in which students can express and discuss their thoughts comfortably, and learn unit subjects with different activities and has a wide pool of content. For example, in Unit 3 of 5th grade, “People, Places and Environments”, the effect of climate of the environment on human activities, the effect of natural and human environment on population and settlement can be discussed by the students, solution suggestions for various problems faced by people can be listed, each student can declare his / her view and thus the doors to original and creative ideas can be opened.

In social sciences courses, curious students should be supported. Students who are less committed to traditions, open to innovations and curious are more likely to have high levels of creativity. Curious students are open to experiencing new emotions and thrills (Yavuzer, 1989, p.22). If students do not encounter problems that will force and allow them to get involved in events, their thinking structures will not develop much. The more students encounter problems related to everyday life and have to solve, the more their creative thoughts and ability to produce different answers develop (Yüksel, 2016, p.20). The general purpose of the education is to provide students with the ability to comment on the problems that arise in their daily life, to produce ideas, to relate the event to different situations and to find solutions to existing problems. This applies to the social studies course as well (Memişoğlu, 2001, pp.22,70).

Creative students are able to take responsibility for the learning process, manage the process personally and take an active role in the classroom by enabling a student-centered education. According to Enger and Yager (1998), in contrast to the rote learning approach of traditional education, an education based on discovery and where the student is in the center will increase the creativity of the students at the highest level (Cited by. Köse Biber, 2014, p.16). Students who are active learners are expected to demonstrate self-regulation, critical and creative thinking and learning processes (Ün Açıkgoz, 2009, p.39). Social studies course is a course in which the student can be placed at the center of the learning process using various teaching techniques and can be easily allowed to learn actively. For example, the title of “What I Learned from the Social Studies Course” in the “Individual and Society” unit of the 5th grade social studies textbook can be performed by the students with creative drama. As the answer to the question “What does an effective citizen do”, citizenship duties such as complying with the law, voting at election time, paying taxes can be dramatized by students in the classroom and a completely student-centered teaching process can be carried out.

Students should be able to conduct research on the subject they are interested in and support the work they have started on their own accord. Creative students can initiate studies on their own. Depth vision, comprehension, and investigative personality tendencies can be found in each student (Gökalp, 2016, p.32). Students should be allowed to be open to new experiences (Öztürk, 2001, pp.162-163).

To train a creative individual, the student should be given the habit of divergent thinking in the social studies course. Instead of creating patterns of thought (convergent thinking) in their minds by teaching students verbatim history and events related to the past, it is important to educate an individual armed with creative skills to enable them to gain the knowledge to be taught in existing
alternative ways, or to encourage students to come up with original solutions to problems by exploring new ways (divergent thinking) (Gartenhaus, 1997, pp.11-15).

Students should be allowed to work together and interact with each other in social studies. Interaction improves the human and the brain. Even the simplest learning takes place in interaction and communication (Ün Açıkgöz, 2009, pp.50-51). Interaction allows the student to become a kind of partner in the thoughts of others and to benefit from their creative thinking through their imagination.

Students should be given the opportunity to develop their creative skills in social studies and to develop projects related to curriculum and daily life. When necessary, these projects should be initiated with the encouragement of teachers and students should benefit from their teachers as guides in the process. With project and performance tasks, students will be given the opportunity to demonstrate high-level thinking skills that they can use in everyday life. These projects develop students’ high-level mental skills, particularly creativity, such as research, communication, problem-solving, reading comprehension, and association (MEB, 2009 Cited by. Bozkurt, Aslanargun, Akın, Kılıç, 2014, p.158).

Students should be given the opportunity to do studies and activities that allow them to demonstrate their creativity, but they should not be restricted to single-level activities. Different students can reveal their creativity in very different ways. According to Ün Açıkgöz (2009, p.297), students who participate in the active learning process have the right to choose between different learning techniques, teaching lessons and various techniques. As in traditional education, students do not have to think simultaneously, look at the same thing and attend the same event at the same time. In this case, students can easily reveal their original thoughts about objects and events, question them and relate them in their imagination.

6. Creative Learning Environment

The development of creative thinking begins at preschool and continues through the school term. However, due to the education system, there are criticisms that the classroom environment does not improve creative thinking, but rather leads to its blunting (Öztürk, 2001, p.163; Gartenhaus, 1997, pp.11-15; Gökalp, 2016, p.26).

Especially when it comes to a rote learning, it is not possible to talk about the child's creativity or creative thinking because of the obstacles to the child's imagination, thinking and thoughts (Sönmez Ektem, 2016, pp.89-90). In order to overcome these obstacles, there are some general issues that need to be taken into consideration in the classroom environment. As with other courses, it is necessary to pay attention to these issues in the social studies course.

First of all, it is necessary to pay attention to individual differences. Subjecting all students to the same program and loaded programs is a practice that can only be observed in the rote learning system. The education understanding, which does not attach importance to cognitive development and is based solely on logical thought, precludes creativity in classrooms (Öztürk, 2001, p.161). It should be noted that the classroom environment is an atmosphere where students learn differently from each other. In this environment, each student has a different level of maturation, past experiences and school readiness. Social studies course is a course that will offer students with different learning patterns the chance to study with different materials and methods. For example, when giving a lecture on the conquest of Istanbul, an Istanbul model, a documentary/film about the conquest, or actual materials that can be discovered by students on field trips can be easily used in this course. Or it can also be learned by various methods, such as subject discussion method, case
study method, or brainstorming (Öztürk 2001, p.161). The encounter of the child with these rich stimulants in an educational environment will contribute to his / her creative thinking skills.

School administrators provide opportunities and resources for students to conduct research. In the school environment, there are no compulsory considerations to be observed (Torrance, 1962 Cited by. Sungur, 1992, p.238). According to Safran (2006, p.10), for the development of creativity, educational environments in schools should be contemporary environments with technological and scientific infrastructure. Classrooms should be designed according to the properties of the courses. The belief that the use of creative thought is unique in numerical courses constitutes the perception that the disciplines of the social sciences consist of rote. In this case, courses such as history, geography and literature also form obstacles to the development of the student's creativity. This is true for social studies, which presents subjects of disciplines such as history, geography to the students at primary and secondary school levels. Even if laboratories created especially for this course cannot be provided, technological classrooms that can be used in the social studies course and all other courses should be created, and these classes should provide students with very different materials and life experiences. According to Şengül and Akça (2009), the effect of such environments in developing creativity is quite large.

The creative learning environment is not an environment that remains constant all the time. Turning some spaces of school or classroom into a sacred place is also not the characteristics of a creative school. The school layout may vary on specific days and weeks, at various events, and in accordance with the wishes of the students (Gökalp, 2016, p.31). Ün Açıkgöz (2009) cites that even class placement patterns can be changed according to students' learning activities, for example, U, V, O placement patterns will contribute to active learning by increasing the student's interaction within the classroom. The aforementioned placement patterns are the patterns which can be used easily in social studies courses and obtain effective results. For example, all of the students discussing a historical subject will be able to interact with each other easily in the “O” placement pattern and declare their ideas face-to-face. In addition, Warner and Myers (2010, pp.28-32) stated that the creation of gaps in the classroom environment in order to provide free movement of students will contribute to the creativity of the student.

Wilson (1997) stated that students cannot act comfortably in an environment where they are under supervision and constantly observed by the teacher while studying and dealing with a task and that their creativity will be hindered and made it clear that a classroom atmosphere that values freedoms rather than an overly laudatory or overly critical class atmosphere will lay the groundwork for the student's creative skills to come to the forefront (Cited by. Sönmez Ektem, 2016).

The contribution of the different educational environments provided to the student to creativity is of great importance (Yuvaci, 2017, p.44). The educational environment should not only consist of classrooms but museums institutions and organizations, exhibitions and historical places should be designated as educational environment when their time and place come.

Again, according to Wilson, environments where children compete with each other impede creativity. A learning environment that puts students in a state of winning or losing means ignoring the feelings and analyses of children (Cited by. Sönmez Ektem, 2016, p.90). In social studies course where subjects are largely abstract, such as history, geography, are presented by simplifying and integrating at the primary and secondary school level, a project-oriented class environment rather than an exam-oriented classical classroom environment, which offers students free movement and unlimited interaction, will also take out students from the winning-losing position. All students will be subject to a fair evaluation system within the scope of the product/project they have developed using their creativity. Memişoğlu (2001), in the study he conducted, also concluded that a project-
based teaching process in social studies course developed students' creativity in a positive and significant way.

Apart from all these, the physical state of the classroom is also highly effective on the creativity of the students. The lighting of the classroom, the color of the walls, decoration, furniture, materials, the size of the classroom and the effect of affective variables on the creativity of the students cannot be overlooked. Aspects such as the decorations on the walls of the classrooms, optimum temperature and space of the classrooms, whether the classroom has sufficient natural light or illumination, the aesthetic aspect of the fixtures in the classroom affect the creativity of the students in a positive way (Warner and Myers, 2010, pp. 28-32). In classrooms, panels and exhibitions can be created with various decorations, projects or materials for the social studies course well as for each course. The materials produced by the students in the context of the subjects of the units can be exhibited here and the products in the exhibition can be updated continuously with new studies. This will allow students to benefit from each other's creative skills and imagination.

7. Material Supporting Creative Skills

Material development efforts that started with the teaching technologies and material design course that we encountered during teacher education and continued by moving to the educational environment not only positively affects the development of creativity skills in teachers and students, but also allows them to develop useful and effective materials related to their own learning areas when necessary (Kolburan Geçer, 2010, p. 22). In fact, in this process of double-sided processing, students and teachers use their creativity to open the door to new and completely different ideas with the materials they have developed. As a result of the research carried out by Yanpar, Koray, Parmaksız, Arslan, (2006, p. 142), the result that hand-made materials are more creative and original confirms this idea. However, according to Kaya (2006, p. 27), if there are ready-made materials that can fully meet the requirements of the students, the use of these materials or using existing materials may by adapting them to the subject also provide some advantages in terms of time and cost.

The countless materials found in the world we live in are produced hand-made by humans in order to meet human needs and to produce solutions to a number of problems, and they contain the creativity of human beings. According to Yanpar (2005, p. 330), social studies is life itself and many tools found-used in everyday life can be used as a material in the social studies course. For example, during the narration of an event in history, museums and various historical artifacts may be transferred into teaching materials (Cited by Yeşîtaş, 2009, p. 230). Social studies, in this context, is a fairly fortunate field of study. The use of creative educational materials in classrooms and the social studies course will contribute students to share a number of experiences happened in the past. This will ignite students’ critical thinking, problem solving and creative thinking skills in the face of situations experienced in the past and likely to experience in the future and it will be possible for the students who use these skills to gain virtual experience by confronting real-life situations and problems in advance, in other words, to do a pre-rehearsal (Kara & Akkaya: 2014, p. 218). In social studies teaching, the teaching materials that can directly improve students’ creativity skills are fiction and imagination-based materials such as hand-made materials, literary products, newspapers and magazines, films and documentaries, historical materials/real objects, educational games and software and simulations.

Handmade Materials/Activity Materials

Kaya (2006, p. 26) defines teaching materials as “The materials offered by the teacher to the students in different environments during the learning process”. In order for the students to achieve
their goals, they must be synthesized, these syntheses must be formed according to the principles of material preparation, and in the process of creating the materials, the designer's previous experiences and skills related to creativity must be integrated. When creating the material, creativity is required in the selection of elements such as form, shape, emphasis and harmony during the design stage, as well as creativity in planning the location of the material within the instructional design (Yanpar & Yıldırım, 1999; Yanpar et al., 2006).

Undoubtedly, the production of materials used in the educational environment by teachers or students is one of the best options for the learning process. During the construction of these materials, which can be described as handmade materials or activity materials, the student first portrays the material in his / her mind using their imagination, then develops the material by running his / her creative skills to work. Each material developed by students or teachers can be an inspiration for other students. The development of materials by students or teachers also offers the possibility of obtaining materials directly for the needs of the student (Kaya, 2006, p.27). For example, in the social studies course, the preparation of a model that can be used during the subject of the Conquest of Istanbul by the student can be given as a simple example to handmade materials. During the construction of this material, the student will set off from his existing knowledge of the Conquest of Istanbul and will try to design and reflect the conquest in 1453 on a model with his imagination/creativity.

**Literary Products**

What we mean by these products is that they are works based on a particular fiction and imagination, intrigued by some extraordinary circumstances by its author, some of which have been described as commercial books by McGowan and Guzzetti (1991, p.39). In this category, literary works such as various stories, novels and epics are included. The most important common feature of these products is that they include situations that do not actually exist, rather than depicting mere reality. Kara and Akkaya (2014, p.217-219) stated that these works contain events, experiences and fantasies that do not actually exist in order to develop imagination and creativity in children and emphasized that individuals of the future can be raised who have developed imagination, are creative, questioning, curious and have a taste of living with the real and fictionalized world. According to Temizkan (2014), “Writing that includes the fictional world turns into poetry by taking the consistency of an imaginary taste, into the novel and story by opening the paths and doors to worlds that will make a pile of friends for its reader, and into theatre by taking the imitation and the truth arm in arm”. It should not be forgotten that literary products all involve different levels of creativity (Canatak & Bulduk, 2019, p.146). Creativity also requires the fictionality, aesthetic integrity and authenticity that exists in literary works (Öztürk: 2007, p.13).

Literary products are works that deal with the past, present and the possibilities of our future and, as a matter of fact, convey to their readers the social, economic, historical aspect of human life between the past and the future, scientific and technological developments in a fancy-artistic language. Therefore, almost all literary products can be used as educational material in social studies. For example, when teaching the subject “An Epic of Heroism: The National Struggle” in “Culture and Heritage” unit of 5th grade coursebook, various stories and historical novels can be used. There are quite a number of genres and works written on this subject. These works, in terms of the levels of fiction they contain, contribute to creativity at different levels. According to Yalçın Çelik (2005, p.14) it is a fact that works that are written with more fiction contribute more to creativity than works that contain mere reality.
Films and Documentaries

Films are another material that can be used to support creative thinking skills in social studies teaching. In the social studies course, films can be used to teach history and geography subjects, to teach value and to gain various skills. Among these skills, perhaps the most important one is creative thinking skill (Kaya & Çengelci, 2011, pp.123-125). Especially with the growth of the cinema sector, the films that have emerged in educational function also teach the students to respond to the events they may face in their daily lives in a creative way while transferring information (Birkök, 2008, p.3). Because the main point on which the artist, who makes the films that are artworks rely upon, is creativity (Demircioğlu, 2007, p.78). Vidal (2009, p.411), when defining artists, also defined artists as creative persons who interact between the subject and the object that is part of the art. Films that are products of creative people can be presented to the classroom by the teacher during the teaching of any subject, can be stopped in the most crucial scene and questions such as “what can happen next”, “what would you do if you were them” can be asked, and students can be enabled to ignite their creative thoughts to put original ideas forward. Thus, the teacher forces the students to use their imagination, opening doors to the usual counterproductive reasoning i.e. lateral thinking (Sönmez, 1993, p.150). Although all films are products of fiction, it should not be forgotten that fiction is an element that feeds on imagination and nourishes creativity. It is, of course, difficult to find a film about every subject to be taught, but creative teachers with technical infrastructure and facilities can produce creative films with their students in the form of short films (Kaya, 2006, p.198).

Similarly, documentaries are teaching materials that bring people and objects to the classroom, which is far away from the period that the students are living, and which provides first-hand experience to the students and which has the ability to be used easily in social studies teaching (Demircioğlu, 2007, p.80). One of the most important features of the documentary is that it has an informative nature as well as an aspect of creating ideas. For example, documentaries on “Cyprus Peace Operation” or the “Silk Road” can be given as examples that students can use in social studies course and examine the subject in depth (Kaya, 2006, p.162). In the documentary, the director uses both interrogative reality and expressive sensuality together, thus activating emotional and mental activities. The director provides all of this both by staying loyal to the truth and by benefiting from the artistic creativity elements of the cinema (Kuruoğlu, 2006, p.110). In conclusion, films and documentaries are creative thinking products. The use of films and documentaries as teaching materials in the social studies course will open new horizons in the students’ imagination and contribute significantly to the development of their creative thinking skills.

Newspapers and Magazines:

Social studies course, due to its nature that takes its subject from life itself, is a course that requires students to keep track of the events on the agenda and to obtain comprehensive information about the followed subjects. The information obtained on the occasion of this follow-up is structured and made significant by the student (Uygur & Yanpar Yelken, 2010, p.315). Students who read newspapers in social studies class, follow the news and produce thoughts and comments about them will continue to exhibit these useful habits in their later life (Deveci, 2005, p.161). Since news on newspapers presents different perspectives on a subject to the student, they can lead the student to question and contribute to the development of their creative thinking skills (Dilek, 2013, p.53). Magazines, which are another material that can be used in social studies course that convey scientific and technological developments to their readers, have a similar function with newspapers. Although actual newspaper news can be used in social studies course, teaching material can be created by having students prepare newspaper news and publishing a school newspaper. Şengül and
Akça (2009) in the study they conducted appealed to the views of social studies teachers and consequently concluded that having students prepare a newspaper report on the day after the “Battle of Malazgirt” would contribute to the student's creativity.

It should not be forgotten that social studies course is changing constantly because it takes its subjects from the issues of interest to the individual and society (Ilhan, Seker and Kapiçi, 2015, p.44). The most important of the fundamental dimensions of this change, perhaps, are the scientific/technological developments that have been developing around society. Human beings, using their imagination and creativity, are sailing to new horizons every day and this imagination is giving birth to scientific and technological developments. Increasing the level of creativity of students who follow these developments which are the work of imagination and creativity from various newspapers and magazines, is an expected situation (Dolmaz & Kaya, 2017, p.14; Yahiş & Keleş, 2013, pp.701-703).

**Historical Materials / Real Objects**

Today, historical materials are often exhibited in museums and have the feature to be good teaching materials. According to Gartenhaus (1997), there are many types of museums (nature museums, large art museums, archaeological museums, etc.), and museums of these different types contain different materials and it is possible to take advantage of almost all of these museums according to the subject and objectives of the course. Exhibition halls of museums consist of an open hall and have a random style of view in general. The information to be learned in museums is not pre-sorted, and students have the right to concentrate freely on whatever catches their eyes. This almost gives the student the opportunity to “stray between thoughts and ideas”. Thus, museums provide a great provocation for creativity by stimulating the imagination of the student in his / her inner world (Gartenhaus, 1997, p.34).

In the case of making use museums and these historical materials exhibited in museums in the social studies course, the course will be transformed into situations and environments in which three-dimensional, concrete views can be seen and inferences about that period can be made by avoiding the limitations of the book context. In this way, students will be given the opportunity to form emotional and imaginary bonds with the past and the ground will be prepared for them to use their imagination (Kabapınar, 2014, p.314). This kind of materials, which are real objects, will give the students the opportunity to learn by seeing it from the first source and will encourage and develop creativity with the help of their imagination (Kaya, 2006, p. 57).

**Educational Games and Software**

One of the most important materials that can be used in social studies course for a wide variety of purposes today is computer-aided educational games and software. When the games are prepared in accordance with the age of the students, the environment and the purpose of the course, the individuals can be given various knowledge and skills in a fun way permanently and the motivation of the students can be increased before and during the course period (Mindivanlı Akdoğan & Bilgili, 2017, p.183; Akuş & Aslan, 2013, p.63; Bakar, Tüzün & Çağiltay, 2008, p.27; Polat & Varol, 2012). Computer-aided educational games are considered to be one of the most effective forms of learning, learning by doing and, according to Ackerman (1999), it gives the student the courage to experiment and minimizes the fear of making mistakes. Thus, it allows students to produce various strategies to test their limits (Cited by. Özer & Turgay, 2016, pp.75-76). In the game, the possibility of observing, exploring, recreating, assembling and reinterpreting the context related to the problem and subject given to the student is of great importance (Özer & Turgay, 2016, p.76).
Games in general and computer games in particular are the products of imagination and creativity of the person who created/produced it. By using their creativity, teachers and students can also create a variety of games for the social sciences course (Altunbulak, Emir & Avcı, 2006, p.38). Unless there is a need for the creation of a professional computer game, there is no need to have high-level coding knowledge. In fact, thanks to apps like Scratch, teachers and students who don't know coding at all can design simple but purposeful games. Creating such designs provides students with active participation, creative problem solving, and deep thinking (Genç & Karakuş, 2011, p.981).

Simulations

Simulations can be described as “artificial reproductions of a tool, a machine, a system, a form of the functioning of a phenomenon through a model or a computer program for the purpose of study, demonstration, or explanation” (Baudrillard, 2011). They are compact examples of the models that exist in life (Ingram & Jackson, 2004 Cited by. Dağdalan & Taş, 2017, p.162). Simulations created in a computer environment develop the ability to ask questions, detect, analyze, synthesize, and, as a result, establish a new link between information that is considered to be one of the fundamental principles of creativity and allow students to try various methods in reaching a solution. Simulations that allow students to make inferences from their mistakes lead them to think and establish different connections (Özer & Turgay, 2016, p.83). They have the ability to simplify complex situations and abstract concepts (Adams et al., 2008 Cited by. Dağdalan & Taş, 2017, p.162). Simulations involving the creativity of their designers interact with the student's imagination, folding into another form.

While social studies course subjects (history-geography or citizenship knowledge) appeal to different sensory organs with the help of simulations can be taught more permanently to the student, it opens the door to experience a learning experience that is fun and very close to the reality. While teaching the subjects of history, the simulations that almost allow the student to live the moment by allowing historical revitalization, also allow computer-assisted teaching while teaching the subjects of geography (Akça Berk, 2012; Demirkaya, 2004 Cited by. Akbulut, 2004, p.217) and even highly abstract concepts such as parallels and meridians are simulated in a computer environment to help the student comprehend these concepts effectively. For example, in the Dardanelles Epic Presentation Center located on the Gallipoli Peninsula, the moments determining the fate of the war are almost relived by visitors in 11 animation rooms using advanced simulation techniques (URL 1). Given that simulation of almost any substance, concept or event can be easily done in a computer environment, it can be easily stated that simulations are highly functional materials for the social studies course.
8. Conclusion

Creativity is a 21st-century skill as of today, and as with any field, it is the most important of the skills that must be acquired in the field of education. It is not possible to think social sciences that take its subject from daily life apart from the creativity skill that is offered to the individual to produce a quick and practical solution in the face of the problems and situations encountered in daily life. As an inevitable consequence of this coexistence, creativity skills have always found themselves a place in the curriculum of social studies, either directly or indirectly. As in other disciplines, in order to be able to educate individuals who have the human profile required by the age, who can integrate to the rapid change in every field, who can produce solutions to the problems brought by life in an instant, creative individuals and environments are also needed in social studies. If we desire to raise effective and creative citizens, we must first create a creative teaching environment, ensure that the educational materials in the environment foster creativity, and above all, ensure that teachers are creative and lifelong learners. In this study, it is stated in the context of social studies that what needs to be considered in order to regulate the educational environment as creative environments, together with various suggestions for teachers and students to become creative individuals.
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