The aim of this study was to analyze the attainments of map literacy skills in the 2018 Social Studies course curriculum according to the learning areas and examine the applicability of the program. The research sought answers to the following questions: 1. How is the distribution of attainments related to map literacy skills in the 2018 Social Studies course curriculum by class levels and learning areas? 2. What is the level attainments associated with map literacy in the 2018 Social Studies course curriculum related to the lower dimensions of map skills in the high school geography curriculum? 3. What is the applicability level of map literacy skills in the 2018 Social Studies course curriculum for student-centered learning activities? Looking at the results of the study, it was found that at fourth-grade level, there was an improvement in the global connections learning area, where four skills were included with map writing in People and Places and Environments. At fifth-grade level, it was found there were two attainments linked to map literacy in People Places and Environments, while there was one attainment in Global Connections. According to the results of the research, it was found that at sixth-grade level, there were four achievements in People, Places and Environments, one achievement in Production, Distribution and Consumption, and three achievements related to map literacy skills in Global Connections. Finally, at the seventh-grade level, it was found there were two achievements related to map literacy skills in the field of learning People Places and Environments. When Social Studies textbooks were examined, it was observed that map literacy skills and application activities were at a limited level. In Social Studies course learning areas, the level of applicability in terms of map literacy skills is quite high. The recommendations to be developed on this issue are to teach both teachers and students about Geographic Information Systems, where students can find application areas, support map literacy skills.

Keywords
Map Literacy Skill, Social Sciences Curriculum; High School Geography Curriculum, Turkey

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From the moment, humanity comes to earth, they strive to perceive and make sense of themselves, their environment and the world. The way to hold on to the world and adapt is to get to know it enough. Education is of great importance in this identification process. Education is the process of making deliberate and desired changes in human behavior (Tay, 2005).

A map is the transfer of part or all of the earth to paper, using a scale. “In broader terms, the map is an example of a bird’s-eye view of the Earth or part of it, reduced to the desired scale by mathematical methods, drawn on a plane with special signs” (Özey, Ünlü and Üçışık, 2002). Maps show perceived changes and continuities, and location and settlement characteristics of the country, and to see the world as concrete (Karakuş and Oğuz, 2013).

Maps are important for students to understand space and correctly interpret landforms. “The general goals of teaching are to provide enough key information, not to fill students’ minds with very detailed information, but to teach them how to provide and use information when and where it is necessary, and to give students knowledge, skills to make value judgments” (Buğdaycı and Bildirici, 2009).

"Geographical skills and, accordingly, map skills of Primary School students take a very important place in the Social Studies course” (Sönmez, 2010). In order to get the most out of maps, map knowledge must be taught in primary Social Studies courses (Üzümcü, 2007).

One of the central coordinates of (school) Geography is represented by map-related skills. Therefore, both cartography and teaching map skills are part of every program that trains future Geography teachers. Map skill acquisition, however, starts at a much earlier age to formal education in Geography. Regarding formal education, kindergarten and primary school introduce the basics of spatial orientation and map skills. Within this framework, teaching staff are required to facilitate a progressive acquisition of spatial awareness including the capability to represent space. In other words, kindergarten and primary school teachers should foster learners to perceive, understand, and construct mental representations of the physical space starting from the local scale of the home environment and ranging to the global scale. These representations facilitate both the best possible adaptation to the environment they live in and an efficient and balanced use of resources (Dulamă, 2011).

**Theoretical Framework**

Many tools and materials are used in Social Studies teaching, especially visual materials. It is known that visual materials are more effective than written materials and some students learn more easily through visual descriptions. Therefore, it is very important to be able to use visual elements. Visual materials used in Social Studies courses are important to include for students in order to help them understand the text they are reading and to develop a critical point of view (Çelikkaya, 2017).

To get accurate information from the map, you need to use the map correctly. This is also called map literacy (Almî, 2007). Maps are the most essential tool of Geography. Because they help visualize the place (Geography for Life, 1994).
Maps are one of the most widely used course materials in Social Studies (Taşkaya and Bal, 2010). However, it is important that the maps used are suitable for the student’s class level and abilities (Buğdaycı and Bildirici, 2009).

Buğdaycı and Bildirici (2009) define a map as a “communication tool that show where, how, and how positional information is found”. The purpose of using maps is to provide various information about the region in which it is a map (Koçyiğit and Yılmaz, 2009). The use of maps help to develop problem-solving skills related to location and location, allow critical thinking and access to information (Akengin, Tuncel and Cendek, 2016).

According to Castner (1990) students should learn Geography with the map (Taş, 2006). Using maps is a necessity for Geography in schools. Students must develop some basic knowledge about maps (Doğanay, 1993).

In the Social Studies course, a relationship can be established between the subjects in each class and the map used (Köstüklü, 2011). Besides map knowledge, it is important to develop map literacy skills. Today, it is of great importance to provide map literacy skills to train students with innovative thinking systems and to support this with understanding about Geographic Information Systems (GIS).

The research sought answers to the following questions:

1. How does the distribution of attainments related to map literacy skills in the 2018 Social Studies course curriculum occur by class levels and learning areas?
2. What are the level attainments associated with map literacy in the 2018 Social Studies course curriculum related to the lower dimensions of map skills in the high school geography curriculum?
3. What is the applicability level of map literacy skills related to the 2018 Social Studies course curriculum in terms of student-centered activities?

Methodology

This research was conducted by document review, which is one of the qualitative research patterns. During the research process, the 2018 Social Studies curriculum and textbooks from Grades Four, Five, Six and Seven were analyzed using document analysis technique.

Research Design

A qualitative method facilitates understanding and interpretation; it is often used in the Social Sciences and provides the researcher with an opportunity to have an in-depth understanding of the subject (Karataş, 2015). Furthermore, in the Social Sciences “multiple perspectives are needed to achieve holistic understanding of any phenomenon” (Yıldırım and Şimşek, 2016).

Data Collection

Document analysis, a qualitative research method is used to meticulously and systematically analyze the content of written documents (Wach, 2013). As with other methods used in qualitative research, document analysis requires the study
and interpretation of data to make sense of it and create an understanding about the relevant topic, and to develop empirical knowledge (Corbin and Strauss, 2008). During the research process, the 2018 Social Studies course curriculum was analyzed according to the learning areas. The skill sought in learning areas was selected as map literacy skill. At the same time, the high school Geography curriculum has also been studied in the context of map skills. For this purpose, the 2018 Social Studies curriculum, the 2018 high school Geography curriculum and Social Studies textbooks were used.

**Findings**

The research was analyzed in accordance with sub-problems. In this study, the achievements of the 2018 Social Studies curriculum were analyzed according to map literacy skills, and the applicability of the program was examined.

Looking at the first sub-problem of the study, the following findings were reached. The distribution of attainments related to map literacy skills in the 2018 Social Studies curriculum by class levels and learning areas is given in Table 1.

Table 1
*Distribution of Attainments Related to Map Literacy Skills in the 2018 Social Studies Curriculum by Class Levels and Learning Areas (MoNE, 2018b)*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Learning Area</th>
<th>Attainment</th>
</tr>
</thead>
</table>
| 4     | People, Place and Environments | SS.4.3.1. It makes inferences about the location of any place around it.  
SS.4.3.2. It sketches the places he uses in his daily life.  
SS.4.3.3. It distinguishes the natural and human elements in the environment in which it lives.  
SS.4.3.5. It makes inferences about where it lives and the landforms and population characteristics around him. |
| 4     | Global Connections     | SS.4.7.1. Introduces various countries around the world.                                                                                     |
| 5     | People, Place and Environments | SS.5.3.1. Maps explain the landforms of the place where it lives and its surroundings in general.  
SS.5.3.3. It gives examples of the natural features and effects of human features on population and settlement. |
| 5     | Global Connections     | SS.5.7.1. Explores the role of place and environment in economic relations between our country and other countries.                           |
| 6     | People, Place and Environments | SS.6.3.1. Defines the geographical location of continents, oceans and our country using concepts related to location.  
SS.6.3.2. It examines the main physical geography features of Turkey, landforms, climatic features and vegetation on related maps.  
SS.6.3.3. It shows the basic human geography characteristics of Turkey on the related maps. |
SS.6.3.4. Based on human life in different natural environments of the world, it makes inferences about climate characteristics.

SS.6.5.3. It prepares investment and marketing project proposals taking into account the geographical features of Turkey.

SS.6.7.1. Analyzes the cultural, social, political and economic relations of our country with the Turkish Republics and neighboring states.

SS.6.7.2. Analyzes the economic relations of our country with other countries.

SS.6.7.3. Analyzes the roles that our country assumes in the international arena depending on its political, military, economic and cultural characteristics.

SS.7.3.1. It makes inferences about factors affecting settlement from the past to the present through sample investigations.

SS.7.3.2. Interpret the demographic characteristics of Turkey based on the factors affecting the distribution of the population in Turkey.

Looking at the Table 1, it was found that there were four achievements associated with map literacy in People, Places and Environments at the fourth-grade level. Looking at the Global Connections learning area at the fourth-grade level, an acquisition was found to be associated with map literacy. At the fifth-grade level, two attainments were found to be involved in People, Places and Environments learning, while one attainment in Global Connections was found to be associated with map literacy skills.

In Table 1, four attainments were found to be related to map literacy skills when looking at People, Places and Environments at the sixth-grade level, while one attainment in Production, Distribution and Consumption and three attainments in Global Connections were related to map literacy skills. Looking at the seventh-grade level learning areas in the table, it was concluded that only the two attainments in People, Places and Environments are related to map literacy skills.

Looking at the second sub-problem of the study, the following findings were reached. The relationship of map literacy-related attainments in the 2018 Social Studies curriculum with the lower dimensions of map skills in the high school geography curriculum is given in Table 2.

Table 2
The Relationship of Map Literacy Attainments in the 2018 Social Studies Curriculum with the Lower Dimensions of Map Skills in the 2018 High School Geography Curriculum (MoNE, 2018a)
<table>
<thead>
<tr>
<th>Grade</th>
<th>Learning Area</th>
<th>Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Natural Systems</td>
<td>9.1.5. It makes inferences about the properties of time and place using the coordinate system.</td>
</tr>
<tr>
<td>9</td>
<td>Natural Systems</td>
<td>9.1.6. It uses the map using the elements that make up the map.</td>
</tr>
<tr>
<td>9</td>
<td>Natural Systems</td>
<td>9.1.7. Explain the methods and techniques used to transfer information to maps.</td>
</tr>
<tr>
<td>9</td>
<td>Natural Systems</td>
<td>9.1.12. It makes inferences about the characteristics and distribution of different climate types on earth.</td>
</tr>
<tr>
<td>9</td>
<td>Natural Systems</td>
<td>9.1.13. It makes inferences about the characteristics of climate types seen in Turkey.</td>
</tr>
<tr>
<td>9</td>
<td>Human Systems</td>
<td>9.2.3. Explain the factors affecting the distribution of settlements in Turkey with examples.</td>
</tr>
<tr>
<td>9</td>
<td>Human Systems</td>
<td>9.2.4. Distinguishes settlements in Turkey according to their administrative functions.</td>
</tr>
<tr>
<td>9</td>
<td>Global Environment:</td>
<td>9.3.1. Evaluates different regional samples in the world in terms of their characteristics and the criteria used in determining the region.</td>
</tr>
<tr>
<td>9</td>
<td>Regions and Countries</td>
<td>9.3.2. Explains the variability of region boundaries according to purpose with examples.</td>
</tr>
<tr>
<td>9</td>
<td>Global Environment:</td>
<td>9.3.3. It classifies countries located in regions determined by various geographical criteria using a map.</td>
</tr>
<tr>
<td>10</td>
<td>Natural Systems</td>
<td>10.1.8. Evaluates the main landforms in Turkey in terms of their basic properties and distribution.</td>
</tr>
<tr>
<td>10</td>
<td>Natural Systems</td>
<td>10.1.10. Explain the general characteristics and distribution of water assets in Turkey.</td>
</tr>
<tr>
<td>10</td>
<td>Natural Systems</td>
<td>10.1.13. Correlates soil types with factors affecting the distribution of soils in Turkey.</td>
</tr>
<tr>
<td>10</td>
<td>Natural Systems</td>
<td>10.1.16. Correlates climate and landforms with the distribution of plant communities.</td>
</tr>
<tr>
<td>10</td>
<td>Natural Systems</td>
<td>10.1.17. Analyzes the distribution of natural plant communities in Turkey in terms of growing conditions.</td>
</tr>
<tr>
<td>10</td>
<td>Human Systems</td>
<td>10.2.3. Correlates the distribution of the world population with the factors that affect the distribution of the population.</td>
</tr>
<tr>
<td>10</td>
<td>Human Systems</td>
<td>10.2.6. Assesses the distribution of the population in Turkey in terms of factors that are effective in the distribution of the population.</td>
</tr>
<tr>
<td>10</td>
<td>Human Systems</td>
<td>10.2.8. It draws conclusions about the causes and consequences of migrations around the world using historical texts, documents and maps.</td>
</tr>
<tr>
<td>10</td>
<td>Global Environment:</td>
<td>10.3.1. Analyze international transportation lines in terms of their regional and global impact.</td>
</tr>
<tr>
<td>10</td>
<td>Regions and Countries</td>
<td>10.4.1. Explain the causes and characteristics of disasters.</td>
</tr>
<tr>
<td>10</td>
<td>Environment and society</td>
<td>10.4.2. Correlates the effects of disasters with their distribution.</td>
</tr>
<tr>
<td>10</td>
<td>Environment and society</td>
<td>10.4.3. Correlates the effects of disasters in Turkey with their distribution.</td>
</tr>
<tr>
<td>11</td>
<td>Natural Systems</td>
<td>11.1.1. Explain the factors that are effective in the formation and reduction of biodiversity.</td>
</tr>
</tbody>
</table>
In Table 2, it was determined that attainments related to map literacy in the 2018 Social Studies curriculum can be related to *Natural and Human Systems, Environment and Community*, and *People, Places and Environments*.

In addition, in 2018 the high school Geography curriculum for Global Contexts, the regional and country locations are the map skills and in the 2018 Social Studies
curriculum, map literacy skills are associated with Global Connections.

In the third sub-problem of the study, the following findings were determined when looking at the level of applicability of map literacy skills related to the 2018 Social Studies curriculum in terms of student-centered activities. While students are expected to acquire map literacy skills only through activities in textbooks, it has been concluded that documents containing application areas that students can perform do not correspond to the level of skill they want to acquire. It has been observed that the activities of map skills are not sufficient in the books. In addition, it has been determined that the achievements included in the 2018 Social Studies curriculum are intended to be given only through thematic maps. Among the findings that there is no application site for students.

**Result and Discussion**

The Social Studies course is where students can find and learn the skills and values they can learn while living at the highest level. Artvinli (2009) argues that in our country, writing student-centered processes and activities for skills and values is very new. Teacher training provided by the Ministry of Education (MoNE) is faced with this new situation and the constructivist approach is very insufficient because teachers are trained according to the classical approach. According to Artvinli and Kaya (2010) Geography textbooks are part of the development of skills in Geography education. When the goals of the Geography curriculum are analyzed, it is easy to understand that achieving these goals can only occur through processes and activities aimed at developing skills.

Geographical skills and, accordingly, map skills of Primary School students take a very important place in the Social Studies course (Sönmez, 2010). In order to get the most out of maps, map knowledge must be taught in the primary Social Studies course. (Üzümcü, 2007). No course can be taught without the use of teaching tools and materials, and it is unthinkable that a Social Studies course should be taught without the use of appropriate teaching tools and materials. At the beginning of these teaching tools are maps (Güneş, 2016).

In order to see the purpose of Geography, it is necessary to move from the descriptive stage to the geographical inquiry stage, which is the researcher, the interrogator. The inquiry stage reveals a mutual adding to a causes, and requires on to use and disseminate extensively from the educational process. Along with providing students with the skills required by geographical inquiry, the importance and necessity of the function and enjoyment of Geography can also be understood (Artvinli, 2020).

First of all, geographical questioning skills should be developed in Geography courses to help students understand the environment in which they live because Geography examines the physical and human environments of the world and their interactions with each other and with humans. What makes Geography different from other disciplines is that it focuses on logical research and analysis in this way.

Geographers also investigate the connections between structures such as large landforms, migrations, economic features, and their causes. This research process is
called geographic inquiry. It covers an individual and collaborative process and research that begins with questioning and progresses through the development of activities and the collection, evaluation, interpretation and analysis of results (Artvinli, 2020).

Map skills are required in the basic sense for almost all of the disciplines that make up the Social Studies course. From an early age, maps and spheres should be used so that children can understand the basis of Geography and recognize the environment in which they are located. School-age students can only do this with a Social Studies course (Sönmez, 2010). In a study by Göksel (2007), which examined the level of support for education in the use of maps and graphs in Social Studies teaching, it was revealed that the most important auxiliary material used by Social Studies teachers was maps (55%). In the same study, it was found that the most important course material in the Social Studies course was a map (59%).

Clever use of maps by teacher and student can make teaching and learning activities interesting and useful (Taşlı, 2000). In most studies that examined the states of Social Studies teachers’ use of teaching tools, it was found that the map and Earth Sphere model are the most commonly used teaching tools (Aydemir, 2012; Taşkaya and Bal, 2010; Çoban and İleri, 2013; Çelikkaya, 2013).

Map literacy can provide the individual with the opportunity to understand and interpret thoughts, actions, objects, graphics and symbols, creating awareness of lifelong learning, attainment problem-solving skills with effective learning in developing this consciousness. In order to understand the formats in which information is produced and used in the information age, today’s person must be multi-literate (Duman and Girgin, 2007).

The Turkish Geography curriculum emphasizes geographical enquiry and progress rather than delivering some concrete body of geographical knowledge. Then it gives a great deal of importance to the fact that various learning methods should involve students actively through an activity-based and constructivist education. These are possible only by developing skills that will enable students to observe patterns, associations, and spatial order (Artvinli, 2012).

Children from an early age should use maps and spheres to understand geography and recognize the environment in which the student is located. At school age, they can achieve this only when they are raised as map literate with a social studies course (Sönmez, 2013).

Tuna and Balcı (2013) using the map in the application of geographical skills are used in orienteering, participants (to be able to read symbols and scales, distance, surface features to be able to read) on the map, and navigation in the field, determine the location using the Compass, field studies, preparation of practice with geographical information data acquisition, real-life skills to cope with problems and has determined that as many conflicting situations can improve.

Suggestions

It is also important to prepare an application field for students who can perform activities to improve their map skills. Smart boards are made with innovative
technology to support learning of the class and the workshop where the conditions of increased education and training, Geographic Information Systems, and expanded reality, such as the first teachers of training and then be given to the students to develop their skills is very important for map. Only the information left in theory will thus find an application site.

Today, the power of technology is undeniably important. Along with these trainings, textbooks should also be organized in accordance with the innovative learning model. Map skills can be acquired from early childhood. With the support of the technological infrastructure, it should be the main reason for map literacy skills to train teachers who can use these skills first and then students who have these skills.

References


**Biographical Statement**

**Leyla DÖNMEZ** is a research assistant at the faculty of education in Eskişehir Osmangazi University, Eskişehir, Turkey. She is also a Ph.D. student in social studies education at the faculty of education in Anadolu University, Eskişehir, Turkey. Her interests are on social studies education, map skills and geographical education.