www.rigeo.org ISSN: 2146-0353
RIGE
Review of International Geographical Education

©RIGEO, Volume 10, Issue 1 (Special Issue), 2020

Research Article **Copyright © RIGEO 2020**

To cite this article: Mail Pala, Ş.; Başıbüyük, A. (2020). Investigation of Geography and Social Sciences Curriculum in Terms of Map Skills. *Review of International Geographical Education (RIGEO)*, *10,* (1), Special Issue, 84-96. Retrieved from http://www.rigeo.org/vol10no1/Number1Spring/RIGEO-V10-N1-4.pdf

DOI: 10.33403rigeo.641552

Submitted: October 31, 2019 **Revised:** December 17, 2019 **Accepted:** February 04, 2020

Investigation of Geography and Social Sciences Curriculum in Terms of Map Skills*

Şenol Mail PALA[1]
Erzincan Science and Art Center, Erzincan, TURKEY

Adem BAŞIBÜYÜK[2]
Erzincan Binali Yıldırım University, Erzincan, TURKEY

Abstract

Map skills are included in the curriculum of different courses in basic education and secondary education, although they are more involved in the Social Sciences Curriculum (SSC) and Geography Curriculum (GC). Based on this situation, the research aimed at a comparative examination of the mapping skills included in the SSC and GC, which were updated in 2018. In the research, qualitative research model and document review method were preferred. The data source of the study was designated as 2018 SSC and GC. The analysis of the data was done with descriptive analysis technique. As a result of the research, it was observed that the map skills included in 2018 SSC continued in 2018 GC. However, different mapping skills were also included in the 2018 GC. In 2018 SSC 'people, places and environments' (PPE) learning area attainments in grades 4, 5 and 6 are observed to include map skills. However, other areas of learning of these grades and 7. It was determined that none of the attainments in classroom learning areas included map skills. In the 2018 GC, mapping skills were included in the attainment of almost all grades and units. In the 2018 GC, it was reached that the numbers of attainments involving mapping skill are similar in their distribution to grades, while there are differences in their distribution to units. However, the 2018 GC has been observed to include more extensive mapping skills than the 2018 SSC.

Keywords

Map Skills, Geography, Social Sciences, Curriculum

*A portion of this research was presented in 2. International Congress on Geographical Education (UCEK/ICGE-2019), 3-5 October 2019, Eskişehir-Turkey.

[1]Corresponding author: Dr., Erzincan Bilim ve Sanat Merkezi, Erzincan, Türkiye, E-mail: senolmailpala [at] gmail.com, ORCID: 0000-0002-0489-9557

[2]Prof.Dr., Erzincan Binali Yıldırım Üniversitesi, Fen-Edebiyat Fakültesi, Coğrafya Bölümü, Erzincan, Türkiye, E-mail: abbuyuk [at] gmail.com, ORCID: 0000-0001-8597-6915

Maps are instructional materials that can provide the necessary information for the problems that can be encountered in daily life and contribute to the solution of the problems. Maps help to solve problems related to location and place and improve people's problem solving skills. Maps also allow people to access information themselves (Akengin, Tuncel & Cendel, 2016). Maps reflecting the distribution in place and the mutual relationship (Taş, 2008), show the principle of distribution in geography. (Koç & Karatekin, 2016). Because of maps, people are able to recognize their environment and acquire the ability to perceive and analyze geographical events occurring around them and around the world (Çifçi, Aksoy & Koç, 2017).

Maps are extremely important as a teaching tool in showing the distribution of case, phenomenon and features. Therefore, one of the most basic skills in geographic skills has been mapping skills (Taş & Kızılçaoğlu, 2007; Bahar, Sayar & Başıbüyük, 2010; Koç, 2013). Maps is an important skill, creating, interpreting and using (Çifçi, Aksoy & Koç, 2017). Map skills are one of the skills most needed in daily life (Robinson, Morrison, Muehrcke, Kimerling & Guptill, 1995). It is possible to have map skills, to use and understand maps correctly (Kaymakcı, 2015). Individuals with map skills are more successful than other individuals in obtaining information about the place (Bahar, Sayar & Başıbüyük, 2010).

Maps can be complex in structure and can accommodate abstract expressions. For this reason, map skills should be gained by cascading and taking into account the developmental characteristics of the students. (The Ministry of National Education [MoNE], 2005). Map skills in the first and second stages of basic education and secondary education should be structured in three stages in a hierarchical order, in order to sort the various map skills, to determine their details and the relationship between them (Demiralp, 2006).

Standards have been developed in primary and secondary education programs to enable students to have basic map skills in the world (GESP, 1994; DFEE, 1999). Map skills at the basic level of education, geography first, then social science curriculum is included in the curriculum applied in our country from the Republic to the present day (Sönmez & Aksoy, 2013). It is widely used in social sciences course, maps (Taşkaya & Bal, 2010). It is very important to give individuals knowledge and skills about maps, in social sciences course (Koç & Karatekin, 2016; Pala & Başıbüyük, 2019). Map skills (direction finding, drawing sketches, comparing maps of different scales, etc.) students are taught in many learning areas of social sciences course (Sönmez & Koç, 2017: 181). In addition, the student is expected to use the map and access the information on the map himself (Pala & Başıbüyük, 2019).

The map skills attainment in social sciences in basic education should be taken into consideration and the preliminary knowledge of the students should be used, while the attainments related to the map skills in secondary education are being processed (Kızılçaoğlu, 2007). Maps are used in the distribution of geographical events and facts in the field/classroom studies, map studies are considered in the geography course. Map skills in secondary education include: “Choosing a map according to its purpose, positioning on the map, transferring information on the map, interpreting the map

correctly, sensing place distribution, making calculations using maps and creating draft maps" skills. In addition to these, using orb and atlas is one of the geographical skills, but this skill is more of a geographical skill gained in basic training programs, other than these (MoNE, 2018a).

Problem Statement

What are the similarities and differences of mapping skills in social sciences and geography courses? While mapping skills are included in these programs, are the principles of helixness, sequence and continuity paid attention?

Sub-Problems

1. What skills related to the map are included in the 2018 SSC and GC?
2. What is the distribution of skills related to maps by grades and areas of learning in 2018 SSC?
3. What is the distribution of map-related skills based on attainments in the 2018 SSC?
4. What is the distribution of map skills in the 2018 GC by grade and units?
5. How is the distribution of usage numbers of map skills to grades and units in the 2018 GC?

Purpose of Study

Especially in recent years, skill training is highly important in both basic and secondary education curriculum. Many skills are included in the curriculum. And map skills are also included in these skills. It is more involved in the SSC and GC in association with being in the curriculum of different courses in basic education and secondary education, map skills. Based on this situation, the research aimed at a comparative examination of the mapping skills included in the SSC and GC, which were updated in 2018.

Methodology

Research Design

In the research, qualitative research model and document review method were preferred (Gürbüz & Şahin, 2018: 103). Document review is the examination of the data related to the intended subject by using various documents. In document review, data is obtained by analyzing written materials containing information about the facts intended to be investigated (Yıldırım & Şimşek, 2006: 187). In the technique, also called documentary survey, data is collected from documents (Karasar, 2017: 229). Documents such as written curriculum, course drafts, timelines and papers can be used in studies covering educational institutions (Robson, 2017: 401). It was used as the source of data in the study of 2018 SSC and GC.

Data Collection Tools

In order to collect data, checklists have been created for both social sciences and geography courses in line with expert opinions, attribution and explanations in instructional programs. The map related skills mentioned in the instructional programs are included in the checklist.

It is stated which learning area or attainment these skills are associated with, and which skills are included in the 2018 SSC and GC. For this reason, the data were collected through checklists based on the map related skills and the relationship of these skills with the achievements in the teaching programs.

Data Analysis

The data collected was also analyzed by descriptive analysis technique. The data were arranged and interpreted in accordance with the theme posed by the questions mentioned in the case of problems.

Findings

Map-regarding skills in SSC and GC in 2018

The map-related skills included in the 2018 SSC and GC are shown in Table 1.

Table 1
The map-related skills in SSC and GC 2018

Social Sciences	Geography*
Perception of the Spatial	Perception of the Spatial Distribution
Location Analysis	Positioning on the Map
Map Literacy	Making Calculations Using Maps
	Transfer Information onto the Map
	Choosing a map according to its purpose
	Interpret the Map Correctly
	Creating Draft Maps

* In the 2018 GC, map-related skills are referred to as 'map skills', although the descriptions include the content of map skills as shown in the table.

When table 1 is examined, it is seen that map-related skills in 2018 SSC are perception of the spatial, location analysis and map literacy. In 2018 GC, it is seen that under the name of map skills, perception of the spatial distribution, positioning on the map, making calculations using maps, transfer information onto the map, choosing a map according to its purpose, interpret the map correctly, creating draft maps.

Grades and Learning Areas of Skills Related to Maps in SSC

Table 2
The map-related skills included in the grades and learning areas 2018 SSC

Learning Area	4.Grade	5. Grade	6. Grade	7. Grade
People, Places, Enviroments	Perception of the Spatial, Map Literacy, Location Analysis	Map Literacy	Perception of the Spatial, Map Literacy	-

When the table 2 is analyzed, it is seen that map skills are not included in the 7th grade in 2018 SSC. Map skills are shown to be included in the 2018 SSC 4, 5 and 6 grades in the PPE learning area. However, other areas of learning of these classes and 7th grade it is observed that none of the classroom learning areas include map skills. It can be said that attention is paid to the 4, 5 and 6. grade in the learning areas PPE in the SSC similar map skills are included in the classes, albeit partly on the principles of helixness, sequence and continuity.

Skills and Attainment Related to Maps in SSC

The distribution of the map-related skills in 4th grade PPE learning area in SSC attainments is presented in Table 3.

Table 3
The distribution of the map-related skills in 4th grade PPE learning area in SSC by attainments

Learning Area	Skills	Attainments
People, Places, Enviroments	Perception of the Spatial, Map Literacy, Location Analysis	SB.4.3.1. It is found in inferences about the location of any location around it. SB.4.3.2. Draws a sketch of the places he uses in his daily life. SB.4.3.5. It makes inferences about the landforms and population characteristics of its habitat and surrounding areas.

When the table 3 examined 4th grade SSC, it is observed that map-related ‘perception of the spatial’, ‘map literacy’ and ‘location analysis’ skills are included in the PPE learning area. In addition, it was determined that 3 of these attainment were included.

Table 4
The distribution of the map-related skills 5th grade in the PPE learning area in the SSC by attainments

Learning Area	Skills	Attainments
People, Places and Enviroments	Map Literacy	SB.5.3.1. It explains the place where the maps live on and the landforms of its surroundings in general.

According to the table 4 it is observed that map literacy skills are included in the 5th grade SSC as maps related skills in the field of PPE learning area. It was determined that this skill was included in only one attainment.

Table 5
The distribution of the map-related skills 6th grade in the PPE learning area in the SSC by attainments

Learning Area	Skills	Attainments
People, Places, Enviroments	Perception of the Spatial, Map Literacy	SB.6.3.1. It defines the geographical position of continents, oceans and our country by using concepts related to location. SB.6.3.2. The basic physical geography features examines of Turkey on maps related to landforms, climate features and vegetation. SB.6.3.3. Shows the basic human geography features of Turkey on related maps.

According to the table, 5th grade SSC, it is observed that ‘perceprion of the spatial’ and ‘map literacy’ skills are given in relation to the map in the PPE learning area. It has been achieved that there are three different attainments involved in these skills.

Distribution of Map Skills by Class and Units Included in the 2018 GC

Table 6
The distribution of map skills by the grade and units included in the 2018 GC

Units	9. Grade	10. Grade	11. Grade	12. Grade
Natural Systems	Map Skills	Map Skills	Map Skills	-
Human Systems	Map Skills	Map Skills	Map Skills	Map Skills
Global Enviroment: Regions and Countries	Map Skills	Map Skills	Map Skills	Map Skills
Environment and society	-	Map Skills	-	Map Skills

According to the table 6, 12. grade ‘natural systems’, 9. grade ‘environment and society’ and 11. grade ‘environment and society’ is not included in the units, map skills are given in all units except these units. In addition, in the 2018 GC, almost all units of

all classes are given map skills and attention is given to the principles of helixness, sequence and continuity.

Table 7
The distribution of map skills by the 9th grade and units included in the 2018 GC

Units	**Attainments**
9.1. Natural Systems	9.1.5. Inferences about time and place properties by using coordinate system. 9.1.6. It uses the map by taking advantage of the elements that make up the map. 9.1.7. The methods explains and techniques used to transfer information to maps. 9.1.12. It makes inferences about the properties and distributions of different climate types on Earth. 9.1.13. Inferences about the characteristics of climate types seen in Turkey.
9.2. Human Systems	9.2.3. The factors explains affecting the distribution of settlements in Turkey with examples. 9.2.4. Distinguishes settlements in Turkey according to their administrative functions.
9.3. Global Enviroment: Regions and Countries	9.3.1. Evaluates different region examples in the world in terms of characteristics and criteria used in region determination. 9.3.2. The variability of regional boundaries explains according to purpose with. 9.3.3. Classifies countries in regions determined by various geographical criteria using maps.

According to the table 7, 9. grades GC, the distribution of map skills according to units and attainments was found that while the attainments related to map skills were most commonly included in the 'natural systems' unit, they were not included in the 'environment and society' unit. in the unit 'natural systems' there are five, in the unit 'human systems' there are two and in the unit 'global environment: regions and countries' there are three achievements related to mapping skills.

Table 8
The distribution of map skills by the 10th grade and units included in the 2018 GC

Units	**Attainments**
10.1. Natural Systems	10.1.8. Evaluates the main landforms in Turkey in terms of their basic characteristics and distribution. 10.1.10. The general characteristics and distribution explains of water assets in Turkey. 10.1.13. The soil types with factors affecting relate the distribution of soils in Turkey. 10.1.16. The distribution of plant communities and climate and landforms relates. 10.1.17. Analyzes the distribution of natural plant communities in Turkey in terms of growing conditions.

10.2. Human Systems	10.2.3. Correlates the distribution of the world population with the factors that influence the distribution of the population. 10.2.6. Evaluates the distribution of the population in Turkey in terms of factors that are effective in the distribution of the population. 10.2.8. It makes use of historical texts, documents and maps to draw inferences about the causes and consequences of migrations around the world.
10.3. Global Enviroment: Regions and Countries	10.3.1. Analyzes international transportation lines in terms of their regional and global impact.
10.4. Enviroment and Society	10.4.1. The causes and characteristics of disasters explains. 10.4.2. The effects of disasters with their distribution relate. 10.4.3. Relate the distribution and effects of disasters in Turkey.

Table 8 at, 10. grade GC, the map shows the distribution of skills by unit and attainments. The attainments related to mapping skills are most commonly found in the 'natural systems' unit and least in the 'global environment: regions and countries' unit.

Table 9
The distribution of map skills by the 11th grade and units included in the 2018 GC

Units	**Attainments**
11.1. Natural Systems	11.1.1. The factors that are effective in the formation and reduction of biodiversity explains.
11.2. Human Systems	11.2.5. Interpret the global and regional effects of cities in functional terms. 11.2.6. Distinguishes cities in Turkey according to their functions. 11.2.16. The place of Agriculture in the Turkish economy explains. 11.2.17. The distribution of Turkey's mines and energy resources explains. 11.2.19. The characteristics of industrial sector in Turkey explains.
11.3. Global Enviroment: Regions and Countries	11.3.1. The factors that determine the emergence, spread and distribution of the first cultural centers explains. 11.3.2. The factors affecting the spread of different cultural regions on Earth explain. 11.3.3. The spread areas of Turkish culture in terms of regional characteristics analyze. 11.3.4. Turkey's position as a center of civilizations throughout history evulates. 11.3.5. It relates trade between countries and regions and areas of raw materials, production and trade.

According to the table 9, the most attainments in mapping skills in the classroom are given in units called 'human systems' (5) and 'global environment: regions and countries' (5), while attainments in mapping skills is given in units called 'natural systems'. In the one called 'environment and society', no attainments related to mapping skills were given.

Table 10
The distribution of map skills by the 12th grade and units included in the 2018 GC

Units	Attainments
12.2. Human Systems	12.2.4. The functional regions in our country according to their characteristics analyze. 12.2.10. The World Trade Centers and networks in terms of their place in the global economy analyzes. 12.2.11. The effects of Trade Centers in Turkey on tradable products and flow directions explains. 12.2.12. The historical trade routes in terms of Turkey's position. Silk and spice routes are included evulates. 12.2.13. Turkey's foreign trade and its place in world markets in terms of products subject to trade analyze.
11.3. Global Enviroment: Regions and Countries	12.3.1. The change in the positional importance of continents and oceans with examples and axplains. 12.3.2. The regional and global effects of countries ' position evaluates. 12.3.4. The relationship between Turkey and the geopolitical regions explains. 12.3.5. The historical and cultural ties between Turkish cultural regions and our country explains. 12.3.9. Evaluates the regional and global relations of countries in terms of natural resource potential evaluates. 12.3.10. The impact of major energy transmission lines in the world to regions and countries. 12.3.11. Spatial elements that pose problems between countries to areas of conflict related today.
12.4. Enviroment and Society	12.4.4. The threats to common natural and cultural heritage describes.

According to the table 10, the distribution of map skills units in the 12th grade GC hows that no attainments related to map skills are included in the ‘natural systems’ unit. The most attainments are included in the unit “global environment: regions and countries” (7). In addition, the “human systems” (5) and “environment and society” units have also included attainments related to mapping skills.

Distribution of Use Numbers of Map Skills to Classes and Units in the GC 2018

The distribution of map skills to grades and units in the 2018 GC is shown in Table 11.

Table 11
The distribution of map skills to grades and units in geography curriculum 2018

Grades	Units				Total
	Natural Systems	Human Systems	Global Enviroment: Regions and Countries	Enviroment and Society	
9. Grade	5	2	3	-	10
10. Grade	5	3	1	3	12

11. Grade	1	5	5	-	11
12. Grade	-	5	7	1	13
Total	11	15	16	4	46

According to table 11, the class with the most attainments in map skills is 12 and the class with the least is 9. although there are classes, it is seen that all classes are close together in terms of the number of attainments related to map skills. When we look at the distribution of attainments related to mapping skills according to units, it is seen that the most attainments are given in the unit 'global environment: regions and countries' and the least attainments are given in the unit 'environment and society'

Results and Discussion

The social sciences course is one of the courses where students' attainment skills related to maps (Koç & Karatekin, 2016). The 2018 SSC includes map-related perception of the spatial, location analysis and map literacy skills (MoNE, 2018b). In the 2018 geography curriculum, it is observed that under the name of map skills, the ability to perceive spatial distribution, select a map according to its purpose, position on the map, transfer information on the map, make calculations using maps, interpret the map correctly and create draft maps (MoNE, 2018a). Therefore, the skills related to maps included in the 2018 SSC continue in the 2018 GC. It is also seen that different map related skills are included in the GC. The reason for this situation can be said to be less geography-related attainments in 2018 SSC. In addition, the increase in the lower skills related to the map depending on the class level can be considered as another reason for this situation.

It can be said 4, 5 and 6th grades in the 2018 SSC that similar map skills are given place in the learning area of PPE and that some attention is paid to the principles of helixness, sequence and continuity. As a matter of fact, excavations and descriptions are also given in a spiral manner in the program (MoNE, 2018b). In the 2018 GC, it can be said that almost all units of all classes are given map skills and attention is paid to the principles of helixness, sequence and continuity. In addition, map-related skills included in the 2018 SSC were included in the 2018 GC. In this attention, it can be said that attention is paid to the principles of helixness, sequence and continuity in teaching map skills between the two programs.

It is seen that there is no place in the 4, 5 and 6th grades it was determined that only map skills were included in the PPE, learning area but map related skills were not included in other learning areas (Çoban & Akşit, 2018). The reason that these skills are only included in the PPE learning area is that the attainments in this area are generally related to geography issues. However, map skills can be used in many subjects and attainments of social sciences course which is formed by the coming together of different disciplines (MoNE, 2005). For example, in his study Kaymakcı (2015) he emphasized the necessity of the map in learning and ensuring that history-related topics are permanent. Therefore, the lack of mapping skills in other areas of learning can be interpreted as a subject that needs to be reviewed for the SSC 2018.

It is observed 4th grade on mapping skills in SSC three in Class, 5. grade one, 6. grade that there are three in the classroom and seven in the whole of the program in total. Therefore, it can be said that map skills were not adequately included attainments in the 2018 SSC, which included 131 attainments. In addition, map literacy levels are increasing as the frequency of using maps increases (Kartal, 2016; Koç & Karatekin, 2016).

In the GC 2018, attainments involving mapping skills can be said to take place in almost all classes and units. The reason for this situation is that many of the subjects in the geography course are suitable for the use of maps (Demiralp, 2007). It is also seen that map skills are improving as the frequency of using maps increases in students in secondary education (Kartal & Koç, 2017).

Looking at the distribution of map skills by classes and units in the GC 2018. 9. and 11. with the 'environment and society' unit in grades 12th, mapping skills were given place in the classrooms and units other than the 'natural systems' unit. It has been found that there is no significant difference between classes in the number of attainments involving mapping skills. Falcon (2019) also reached similar conclusions in his study. However, there were differences in the distribution of attainments involving mapping skills by units. The most attainments in mapping skills were achieved in theg "global environment: regions and countries" unit (16 attainments) and the least atatinments were achieved in the "environment and society" unit (4 attainments).

Considering that the total number of attainments in the 2018 GC is 130 and the total number of attainments in the map skills is 46 (Şahin, 2019), it can be said that map skills are more broadly included than in the SSC 2018.

Suggestions

Although similar map-related skills were included in the 2018 SSC and GC, different map skills were also included in the geography course. For this reason, map-related skills can be replicated in social sciences course and preliminary learning can be provided for other map skills given in geography course in secondary education.

It has been determinedthat map-related skills only in the PPE learning area SSC in the 2018. Other areas of learning may include map-related skills, as the learning area and attainments of the SSC such as 'Culture and Heritage', 'Global Connections' and 'Production, Distribution and Consumption' are suitable for the acquisition and development of mapping skills.

In the 2018 SSC, which had a total of 131 attainments, map - related skills appeared to be involved in only 7 attainments. Therefore, the number of map skills can be increased. Social sciences and geography courses taught 7. grades all except the classroom have map related skills. In terms of continuity skills related to the map can also be given in the grade 7th.

In the 2018 GC, skills related to maps are defined as 'map skills'. Which map skill will be included in the attainments that map skill can be specified. In the 2018 GC the ability to use Globes and atlas is basically the geographic skill attainments in primary

education programs no such skill is directly involved in the 2018 SSC, although there is a statement as. Therefore, necessary arrangements can be made regarding the alignment of the two programs. In the 2018 SSC, map-related skills are included in the description of learning areas. These skills can be matched with direct attainments, as in the 2018 GC.

References

Akengin, H., Tuncel, G. & Cendek, M. E. (2016). The social sciences teachers' opinions about developing map literacy of students. *Marmara Coğrafya Dergisi, 34,* 61-69.

Bahar, H. H., Sayar, K. & Başıbüyük, A. (2010). The study of sketch map reading skills of the students in primary school (Erzincan sample). *Fırat Üniversitesi Sosyal Bilimler Dergisi, 20*(1), 229-246.

Çifçi, T., Aksoy, B. & Koç H. (2017). An examination of map literacy levels of students from various undergraduate programmes according to several variables: Cumhuriyet University sample. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 19*(3), 301-321.

Çoban, O. & Akşit, İ. (2018). Comparison of 2005 and 2017 social studies curriculum in terms of learning area, acquisition, concept, value and skill. *Journal of History Culture and Art Research, 7*(1), 479-505.

Demiralp, N. (2006). Map and globe skills in geography education. *Türk Eğitim Bilimleri Dergisi, 4*(3), 323-343.

Demiralp, N. (2007). Materials in geography education and the geography curriculum 2005. *Kastamonu Eğitim Dergisi, 15*(1), 373-384.

DFEE (1999). The national geography curriculum for England, department for education and emloyment.

GESP (1994). Geography for life national geography standards. Geography education standards project, National Geographic Society, Washington DC.

Gürbüz, S. & Şahin, F. (2018). *Sosyal bilimlerde araştırma yöntemleri; felsefe-yöntem- analiz.* Ankara: Seçkin Yayıncılık.

Karasar, N. (2017). *Bilimsel araştırma yöntemi: Kavramlar, ilkeler, teknikler.* Ankara: Nobel Akademik Yayıncılık.

Kartal, F. & Koç, H. (2017). Examination of map literacy levels of secondary levels students (9 th grade) in terms of certain variables. *Doğu Coğrafya Dergisi, 22*(37), 179-198.

Kartal, F. (2016). Secondary school students examining the rates of map literacy in various variables (master's thesis). Cumhuriyet Üniversitesi, Eğitim Bilimleri Enstitüsü, Sivas.

Kaymakcı, S. (2015). A study on the necessity of map skills in history teaching. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 19*(3), 127-154.

Kızılçaoğlu, A. (2007). A pedagogical look at map skills. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 18*, 341-358.

Koç, H. & Karatekin, K. (2016). The İnvestigation of social sciences teacher trainess' map literacy by various variables. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi,* 16(2), 1522-1542.

Koç, H. (2013). A study on determining the relation between the level of mapping skills and learning styles. *Uşak Üniversitesi Sosyal Bilimler Dergisi, 6*(4), 17-32.

Pala, Ş. M. & Başıbüyük, A. (2019). The effect of mathematics skills on map, graphic and table reading skills ın social studies courses. *Uluslararası Sosyal Bilgilerde Yeni Yaklaşımlar Dergisi (IJONASS),* 3(1), 41-56.

Robinson, A. H., Morrison, J. L., Muehrcke, P. C., Kimerling, A. J. & Guptill, S. C. (1995). Elements of cartography, john wiley&sons. Inc., New York, USA.

Robson, C. (2017). *Bilimsel araştırma yöntemleri; gerçek dünya araştırması.* (R. Çınkır & N. Demirkasımoğlu Çeviri Ed.). Ankara: Anı Yayıncılık.

Şahin, B. (2019). Extended summary a comparative assessment towards the geography course curriculum 2005 and 2018. *Türk Eğitim Bilimleri Dergisi, 17*(1), 81-102.

Sönmez, Ö. F. & Aksoy, B. (2013). Map skills and present of republic elementary school curricula. *Türkiye Sosyal Araştırmalar Dergisi, (171)*, 269-288.

Sönmez, Ö. F. & Koç, H. (2017). Sosyal bilgiler öğretiminde harita, grafik ve tablo kullanımı. Sever, R. & Koçoğlu E. (Ed.), *Sosyal bilgiler öğretiminde eğitim teknolojileri ve materyal tasarımı* (p. 181-199). Ankara: Pegem Akademi.

T.C. Milli Eğitim Bakanlığı (2018a). *Ortaöğretim coğrafya dersi (9, 10, 11 ve 12. sınıflar) öğretim programı.* Ankara.

T.C. Milli Eğitim Bakanlığı (2018b). *Sosyal bilgiler dersi öğretim programı (ilkokul ve ortaokul 4, 5, 6 ve 7. sınıflar).* Ankara.

T.C. Millî Eğitim Bakanlığı, (2005). Talim ve Terbiye Kurulu Başkanlığı, *Sosyal bilgiler 6.-7. sınıf programı.* Ankara.

Taş, H. İ. & Kızılçaoğlu, A. (2007). A critical view of new geography curriculum for high schools in Turkey. *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi, 8*(2), 141-156.

Taş, H. İ. (2008). How to teach geography skills to students?. *Doğu Coğrafya Dergisi, 13*(20), 45-58.

Taşkaya, S. M. & Bal, T. (2010). The cases of primary school's teachers in using the tools for course social sciences. *Akademik Bakış Dergisi, 22,* 1-16.

Yıldırım, A. & Şimşek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri.* Ankara: Seçkin Yayıncılık.

Biographical Statements

Şenol Mail PALA is a social sciences teacher at Erzincan Science and Art Center. He has work on social science education.

Adem Başıbüyük is Professor Dr. Faculty of Arts and Sciences, Department of Geography at the Erzincan Binali Yıldırım University. He has work on human geography, historical geography, geography education and social sciences education.