

Life Science Curriculum and Textbooks: The Comparison of Turkey and Russia

Nur UTKUR GULLUHAN*
Elvira GUSEINOVA**

To cite this article:

Utkur Gulluhan, N., & Guseinova, E. (2021). Life science curriculum and textbooks: The comparison of Turkey and Russia. *Journal of Qualitative Research in Education*, 28, 79-99. doi: 10.14689/enad.28.4

Abstract:

This study aimed to investigate the similarities and differences between curriculum and textbook contents of Life Sciences course in Turkey and World Around course in Russia. To that end, curriculum and textbooks of Life Sciences and World Around in effect in both countries in the academic year of 2019-2020 were examined. In the present study, using the intertwined single-case design of qualitative research designs, document review was opted for as the measure. The data achieved were subjected to descriptive content analysis. Codes, categories and themes utilized in the analysis of curriculum and textbooks were shaped in accordance with the contents of curriculum and textbooks in light of similar studies in the literature. Main features of the curriculum and textbooks and how subjects were presented were examined within the framework of activity and assessment practices. Turkish and Russian Life Sciences Curriculum and textbooks were similar overall but had some differences concerning content. Consequently, it was concluded that it would be more relevant to integrate certain activities and methods that would bring the students closer to real life into the Turkish Life Sciences textbooks.

Keywords: Life science, world around, turkey, russia, curriculum, textbooks.

Article Info


Received: 16 Sep. 2020
Revised: 31 Jan. 2021
Accepted: 17 Feb. 2021

Article Type

Research

© 2021 ANI Publishing. All rights reserved.

*  Corresponding Author: Istanbul University-Cerrahpaşa, Turkey, nur.utkur@iuc.edu.tr

**  Istanbul University-Cerrahpaşa, Turkey, elvira.guseynova1990@mail.ru

Declaration of Conflicts of Interests: None

Introduction

Today, education systems are in continuous transformation and change with the process of upgrading. The effects of this development and the resulting change in the education system of different countries differ for various reasons. For example, the infrastructure and socio-economic levels of the countries differ from each other. Thus, it is believed that similar courses will also be useful in terms of understanding the system of our own country and making future plans to address their structures in different countries. Based on this context, the processing of "Life Sciences" courses in Turkey and Russia was asked to be compared.

After the collapse of the Soviet Union, significant changes were made to the educational system of the Russian Federation. The fact that this system took the form that is in practice today has been realized as a result of a long-term process. During the Soviet era, central administration was as heavy as in Turkey until 1990. Education reforms implemented after 1990 focused on political ideology and the removal of political education from programs, and the learning process was harmonized with the needs of the market economy. Fundamental changes have been made to the structure of the education system, and autonomy has been granted to local governments (Karakuyu & Sariusta, 2013; Mammadova-Telci, 2011). The aim of general education in Russia is to provide an environment for the mental, moral, emotional and physical development of the personality, gain a scientific perspective, learn about nature, society, people and the work they do (Turkoglu, 1998).

All educational programs in the Russian Federation must be subject to the Federal state standard of Education. This standard is the norms and demands that determine the mandatory minimum content of basic educational programs, the maximum educational burden of students, the level of education of graduates of educational institutions, and the main conditions for financing the educational process. In accordance with this standard, there are several state-approved educational programs in the Russian Federation. These programs are detailed according to the State Education Standards, which regulate almost 80% of the content. The remaining 20% are regulated by the program writers themselves. There are traditional and developmental education systems in the Russian Federation. In traditional educational systems 'Russia's School', '21. Century Primary School', 'School of 2000', 'School of 2100', 'Adaptation', 'Perspective Primary School', 'Classical Primary School', 'Planet of Knowledge', 'Perspective' are included. In systems that are developmental 'L. V. Zankov's system', 'D. B. Elkonin-V.V. Davydov's' system (Долгова Анд цветкова, 2014).

All educational programs in Russia are approved by the Ministry of Education and Science of the Russian Federation and are designed to receive the level of knowledge and minimum required by the Federal state educational standard by children when they finish primary school. Complex activities that are not associated with systems that are just developmental are present in all programs, but are not mandatory. In fact, each system is designed with a particular mindset or different ways of perceiving and

processing information in mind. In this way, primary school teachers have opened the way for children to choose textbooks that create a comfortable learning environment from the first days they start school. In this case, the teacher has the right to select the teaching materials only in accordance with the primary general approved basic education program of the educational institution (Айвазян, 2016).

In the School system of Russia, which is one of the most fundamental education systems in Russia, the textbooks related to the education set are included in the federal textbooks list for the 2019-2020 academic year. The leading principles of teaching are introduced as a program that considers the age characteristics of students, the combined use of education and training, the orientation of teaching towards more practice, mastering knowledge, improving cognitive abilities and the formation of universal educational actions. In this system, which complies with the requirements of the Federal State Education Standards at the School of 2100, another system, young school children can learn independently, set goals, acquire necessary information, analyze them, generalize in practice and use them in practice, monitor their activities. It aims to form an active educational activity subject that includes the ability to adequately evaluate. In this system, education is delivered at a high difficulty level (Minaeva, et al. 2016). In the Adaptation System textbooks, the expressions used in educational tasks vary (such as select, compare, find the model, is the statement true, guess, observe, draw conclusions). Learning assignments in this system encourage children to emphasize their important features while analyzing objects and identify their similarities and differences (Смирнова, 2018).

In Turkey, the Ministry of Education determines the curriculum and is obliged to apply in all countries. These programs are prepared separately for each course and grade level by experts in the field. Life Science Classroom Training course is taught as one of the main courses areas in Turkey. It is seen that this course contains elements from the child's life and includes real-life phenomena in its content. This course is taught during the first three years of primary school, with the structure designed by an interdisciplinary approach to public education in Turkey. Children themselves and raise their awareness about laying the foundations of society and the world they live in both the Life Science course is aimed at Turkey. Information on the Life Science course taught in Turkey is explained in the 2018 Education Program (MoNE, 2018). When the theoretical basis of the Life Science course in Turkey, considering available scientific information and knowledge about the multifaceted developmental characteristics of human beings, the harmony between all components, the 'harmonic approach' was adopted. In this context, it has been prepared with the principle that human development does not end in a certain period and that development continues throughout life. Thus, it is recommended to take supportive measures in curricula, taking into account the developmental characteristics of individuals in every age period (MoNE, 2018: 6). On the philosophical basis of the "World Around" course in Russia, there is a "systematic action-based" approach. In this approach, a democratic civil society that meets the needs of the information society helps improve the qualifications of the person and is based on tolerance, cultural dialogue and respect for the

multinational and multicultural Russian society are put at the forefront. Accordingly, ways and methods of students' personal and cognitive development reach the socially desired level are sought. With the education system based on learning content and technologies that determine these methods, transition to social design and construction strategy becomes easier. It is stated that educational content, learning methods and educational process play an important role in the interaction between participants to achieve the personal, social and cognitive development goals of students (Фрос нюо, 2011). It is seen that the theoretical approaches that are at the base of the curriculum of both countries are fundamentally similar to each other. Both are approaches that prioritize the individual and take the development of the individual as a basis.

At the 'School of Russia', the basic curriculum in Russia, the greatest feature of the "The World Around" course is that it clearly expresses holistic nature and equally combines nature, social science and historical knowledge (Плешаков, 2013). Thus, it is possible to say that this course is the equivalent of a Life Science Course at the primary school level in Turkey. The international equivalent of the life science course in Turkey is not available in every country. In general, the subjects of this course are covered under the name of Social Studies course in other countries. However, in Germany, "Sachunterricht" and in Russia, "The World Around" had similar points to life science courses in Turkey. In the literature, there are studies examining the relations between the Sachunterricht course in Germany and Life Science course in Turkey (see Baysal et al. 2018; Pamuk, 2020; Pamuk & Pamuk, 2016; Tural et al. 2017). In addition, there are studies in the literature comparing Social Studies courses in Turkey with Social Studies courses in various countries (see Meray et al. 2012; Osmanoglu & Yildirim, 2013; Ozturk & Ozturk, 2013; Seker, 2014; Yazici, 2009). Studies comparing natural and Environmental Science courses in Russia and Social Studies courses in Turkey have also been found in the literature (see Akhan & Cicek, 2019; Akhan et al. 2019). However, to our knowledge, there was no study comparing the Life Sciences courses in Turkey and the "The World Around" courses in Russia, which has remained under-researched. Thus, this study can fill an important gap in the literature in this aspect.

In this study, the Life Science Curriculum and textbooks in Russia and Turkey "The World Around Education Program" and the similarities between the books and courses aimed to investigate the differences. Thus, in the present study, answers to the following research questions were sought.

1- What are the similarities and differences between the life science curriculum in Turkey and the "The World Around Education Program" in Russia?

- a- What are the similarities and differences between goals?
- b- What are the similarities and differences between the reflection of values?
- c- What are the similarities and differences between the reflection of units?
- d- What are the similarities and differences between the gains?

e- What are the similarities and differences between weekly course hours?

2- What are the similarities and differences between the general structure of textbooks "Life Science" in Turkey and "The World Around" in Russia and the way the subject is handled?

Method

Research Design

In this research, case study from qualitative research design was used. Situations that exist in case studies were explored in depth. At this time, it was studied what were the elements that affect the situation and were mentioned. Case studies are appropriate to the nature of this study because of its characteristics, such as studying a current phenomenon within its own life frame and being able to be used in situations where multiple sources of evidence or data are available (Yildirim & Simsek, 2013). "Nested single state design" was also used from state the study design. This design is used when there is more than one substrate or unit within a single state. In this case, there is more than one analysis unit (Akar, 2019; Yin, 1984). In studies in this design, a limited system is described and studied in-depth (Merriam, 2015).

The limited and multiple subunits in this research were the system, instructional programs and textbooks. In case studies, the goal is not to access general results but to explore, describe and interpret the situation, person or phenomenon in its original environment (Paker, 2015). In this study, Life Science Curriculum and textbooks in Russia and Turkey were examined in depth and integrally and data were obtained that will form the basis of the existing situation.

Data Collection

In this study, document review was used as a data collection tool. Using documents provides a rich source of data for qualitative research (Patton, 2014). The data sources of this research were life knowledge taught in Turkey during the 2019-2020 academic year and Primary School "The World Around" curriculum and textbooks in Russia. When selecting textbooks in Turkey, it was noted that all three classes had different publishing houses. During the selection of the curriculum in Russia, the curriculum and textbooks of the "World Around" course in the "School of Russia" system, which is the basic program, were examined due to the lack of certain similarities in the "The World Around" curriculum in the education systems and the lack of different achievements and practices.

Curriculum and textbooks studied:

1. 2013 World Around Curriculum in Russia (Плешаков, 2013).

2. 2018 Life Science Curriculum in Turkey (MoNE, 2018).
3. Life Science 1, 2. and 3. Grade Turkish Textbooks (Celikbas, Gurel & Ozcan, 2018; Demir, 2018; Kuskaya, 2018)
4. The World Around 1, 2, 3 and 4-grade Russian Textbooks (Плешаков, 2013).

Data Collection Process

First of all, in this research, Turkey and Russia Life Science Curriculum and textbooks were provided. Then, both countries also documents obtained from the official website of the Ministry of Education and primary schools in Turkey and Russia were confirmed as genuine. The curricula and the subjects examined in the textbook for the "The World Around" course were translated into Turkish by a researcher whose mother tongue was Russian and a field expert whose second foreign language was Russian. In the study, while the first researcher was effective in the process of creating the design, data analysis and scientific writing of all parts of the article, the second researcher took part in translating the documents from Russian into Turkish.

Data Analysis

As a result of the document review, the data were subjected to descriptive analysis. The data obtained in the descriptive analysis were summarized and interpreted according to previously determined themes. In the descriptive analysis, the goal is to present the results obtained to the reader in an edited and interpreted format (Yildirim & Simsek, 2013). The themes used in the descriptive analysis of educational programs and textbooks were shaped according to the content of Turkish and Russian life science educational programs and textbooks, considering similar studies in the literature. In this way, the basic characteristics of the Life Science Curriculum and textbooks taught in Turkey and Russia, followed by visual evidence, were examined and analyzed within the framework of presentation methods, effectiveness and evaluation practices.

After the data analysis was completed, the help of two faculty members who are experts in the field working in the Department of classroom education was obtained. Miles and Huberman's (1994) encoder reliability formula was used to ensure reliability. The encodings of researchers and other faculty members were compared with each other, and Miles and Huberman's (1994) coder reliability formula was used. The adaptation of the analysis between researchers and experts was calculated according to the formula "Reliability = Number of Reconciliations/Number of Reconciliations + Number of Disagreements". Encoder reliability between researchers and experts was determined as 0.97 for instructional programs and 0.94 for textbooks. Since the average encoder reliability coefficient obtained as a result of document review is 0.96, the analysis of the data collection tool used in this study can be considered reliable.

Results

Similarities and Differences between Turkish and Russian Curriculum

In this section, findings regarding the first question of the research are included. Given the similarities and differences between curriculums, firstly, the aims of both programs were examined. The related data are given in Table 1.

Table 1.

Objectives of the Courses in the Curriculum

Courses	Aims / Objectives
Turkey Life Science	Knows himself/herself and the environment he/she lives in.
	Has the basic values of family and society.
	It brings national, spiritual and human values into life.
	He/she is aware of what he/she has to do to ensure personal development.
	Improves personal care skills.
	Gains the awareness of living a healthy and safe life.
	Gains social participation skills.
	Gains the ability to perceive time and space.
	It develops the ability to use resources efficiently.
	Gains the skill of learning to learn.
	Gains basic scientific process skills.
	Loves the country and is willing to keep its historical and cultural values alive.
	It is sensitive to nature and the environment.
	Uses information and communication technologies in accordance with its purpose.
Russia The World Around	It creates a respectful attitude towards the family, society, region, Russia, history, culture, nature of the country and modern life.
	Gains awareness of the value, integrity and diversity of the world and its place in it.
	It creates the safe behavior model in various dangerous and emergency situations in daily life.
	It provides the formation of a psychological culture and effective and safe interaction in society.

When Table 1 is examined, it was seen that the aims of the course were generally included in the curriculum in both countries. While there were 14 goals in the Turkish program, four objectives were included in the Russian program. As can be seen from here, the aims of the Turkish program were discussed in more detail. In both programs, first the general purpose, then the detailed objectives in Table 1 are given. Life Science Courses overall objective of the teaching program in Turkey is, "To raise individuals who have basic life skills, know themselves, lead a healthy and safe life, absorb the values of the society they live in, are sensitive to nature and the environment, research, produce and love their country (MoNE, 2018, p. 8). The general purpose of the "The World Around" Curriculum in Russia is to create a holistic picture of the world based on rational scientific knowledge and the child's understanding of personal experience with man and nature and make a person's place in the world known. It also aims to provide the spiritual and moral development of the personality of the Russian citizen in the context of the cultural diversity of Russian society (Плешаков, 2013). When the

reflection of the general aims and detailed objectives is examined, for both countries, it has been seen that it is aimed to develop positive attitudes of the individual about himself, his family, society and country. When the handling of values in both curricula is examined, the obtained data are given in Table 2.

Table 2.

Reflection of Values in Educational Programs

Root Values in Turkey Life Sciences Course	Russian Value Criteria in the "The World Around" Course
<ul style="list-style-type: none"> Responsibility 	<ul style="list-style-type: none"> A person's moral choice and responsibility for nature, historical and cultural heritage, himself and the people around him/her.
<ul style="list-style-type: none"> Patriotism 	<ul style="list-style-type: none"> Patriotism as one of the manifestations of a person's spiritual maturity, expressed with love for Russia, the people, the homeland Citizenship as personal participation in the national and cultural diversity of Russia and the world
<ul style="list-style-type: none"> Benevolence 	<ul style="list-style-type: none"> Social solidarity as recognition of personal and national freedom, having feelings of justice, compassion, honor, dignity in relation to oneself and other people International cooperation as the foundation of peace in the world
<ul style="list-style-type: none"> Justice 	<ul style="list-style-type: none"> A healthy lifestyle in the Union of components: physical, mental, spiritual, social and moral health
<ul style="list-style-type: none"> Friendship 	<ul style="list-style-type: none"> Nature as one of the most important foundations of a healthy and harmonious life of a person and society
<ul style="list-style-type: none"> Honesty 	<ul style="list-style-type: none"> Culture as a process and result of various human life activities
<ul style="list-style-type: none"> Self-control 	<ul style="list-style-type: none"> Science as part of a culture that reflects man's desire to know the laws of the world of nature and society
<ul style="list-style-type: none"> Patience 	<ul style="list-style-type: none"> Art as part of culture
<ul style="list-style-type: none"> Respect 	<ul style="list-style-type: none"> Humanity as a diversity of people, cultures, religions
<ul style="list-style-type: none"> Love 	<ul style="list-style-type: none"> Labor and creativity as hallmarks of a spiritually advanced and morally advanced person Traditional Russian religions and interfaith dialogue as the basis of the spiritual and moral phenomenon of Russian society

When the data in Table 2 are examined, it has been determined that the Turkish curriculum is included as "justice, friendship, honesty, self-control, patience, respect, love, responsibility, patriotism, benevolence" as "root values". However, it has been seen that the Russian curriculum is handled together with the explanations of the values in Table 2. Looking at the similarities between the two programs, it was observed that the 'responsibility' value was included in both. In addition, while the value of "patriotism" in the Turkish program coincided with the values of "patriotism and citizenship" in the Russian program, it was determined that the "benevolence" value in the Turkish program was similar to the "social solidarity and international cooperation" programs in the Russian program. On the other hand, the remaining values differed from each other. However, as a total number of values, it was seen that there was more value in the Russian program than in the Turkish program. The unit names at all grade levels in the curricula of both countries are given in Table 3.

Table 3.

Reflecting The Units in the Courses

Courses	Grade level	Units
Turkey Life Science	All grades 1, 2, 3	Life at Our School Life in Our Home Healthy life Safe Life Life in Our Country Life in Nature
	1st grade	What Is Homeland? How, Where and Where? Where and When? Why?
Russia The World Around	2nd grade	Where Do We Live? Nature City and Village Life Health and Safety Contact Travel
	3rd grade	How Does The World Work? This Magnificent Nature We and Our Health Our Safety What Does Economics Teach?
	4th grade	World and Humanity Nature of Russia Homeland- Part of a Great Country World History Pages Russian History Pages Modern Russia

Referring to Table 3 at the unit at all grade levels in the Life Science course in Turkey, where the same unit in Russia, "The World Around," in the course showed where the different unit names at every grade level. In Turkey, a holistic understanding of units/themes prevailed in both 2005 and 2018 academic programs. Similarly, in the 2005 curriculum, there were three themes in all three classes: "My School Excitement, My Unique Home, Yesterday, Today, Tomorrow". In the 2018 program, units, such as "Life in Our School, Our Home, Healthy, Safe, Our Country and Nature," were included at all grade levels. Subsequently, subjects that are gradually expanded in accordance with class levels were included in these units. However, looking at the situation in Russia, it was seen that there were different unit names at each grade level. These units were similar to the Life Science course with general issues in Turkey. In addition, this principle was not seen in Russia as closely what was seen right away firsts in Turkey.

Another issue related to the curriculum was the acquisitions. Life Science course in Turkey examples of the achievements of Table 4; examples of "The World Around" course in Russia are given in Table 5.

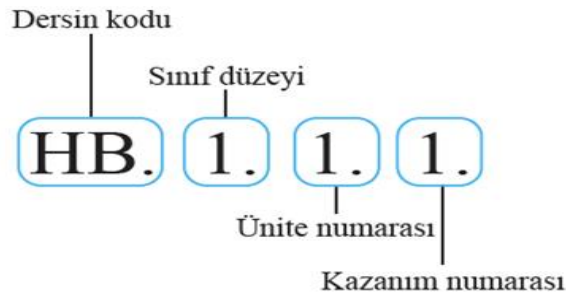
Table 4.*Life Science Course Outcomes in Turkey*

Course	Grades	Outcomes
Turkey Life Science	1st grade	LS.1.1.1. Participates in an in-class meeting event.
	2nd grade	LS.2.1.1. Introduces himself/herself to different characteristics.
	3rd grade	LS.3.1.1. Notices his/her strengths and aspects that need to be strengthened.

In Table 4, the Life Science curriculum in Turkey 1, 2 and 3 are given for the outcomes in the first grade. The achievement given as an example at each grade level was the first acquisition of the unit "Life at Our School". The acquisition numbering system is given in Figure 1.

Figure 1.

Acquisition numbering system within the unit (MoNE, 2018)



As seen in Figure 1, the acquisition numbering system in Turkey, course code, grade level, coded as unit number and number of wins. In the curriculum of the "The World Around" course in Russia, "personal outcomes and interdisciplinary achievements" in the basic education program were included before the learning outcomes. Then, special achievements for the "The World Around" course were included. Some examples of these are given in Table 5.

Table 5.*"The World Around" Course Outcomes in Russia*

Course	Type of Outcome	Outcomes
Russia The World Around	Personal achievements	It provides the formation of the foundations of Russian civil identity, the values of the multinational Russian society, humanistic and democratic value orientations.
	Interdisciplinary achievements	Mastering the ability to accept and maintain the goals and objectives of educational activities allows looking for ways of implementation.
	Special achievements for the course	It provides a respectful attitude towards Russia, indigenous land, family, history, culture, nature of the country and modern life.

As shown in Table 5, "The World Around" course included 'personal, interdisciplinary and special achievements for the course.' In general, the difference that attracted attention in both programs was that one (Turkey) included achievements for the direct

course; the other (Russia) included personal and interdisciplinary achievements before achievements for the course. As shown in Table 4, the achievements in the Life Science course in Turkey showed a more national structure than in Russia. The outcomes in the Russian textbook were more universal. Looking at the weekly course hours in both countries, the data obtained are given in Table 6.

Table 6.

Weekly course hours of "Life Science" courses in Turkey and "The World Around" courses in Russia

Courses	Grades	Course Hours
Turkey Life Science	1st grade	144 hours
	2nd grade	144 hours
	3rd grade	108 hours
	Total	396 hours
Russia The World Around	1st grade	66 hours
	2nd grade	68 hours
	3rd grade	68 hours
	4th grade	68 hours
	Total	270 hours

As can be seen in Table 6, The Life Science course in Turkey was three hours per week, in 1st and 2nd grades, it is more than 3rd grades. In Russia, it was two hours of classes a week, and in all classes, it was almost close to each other. Although it was taught at three grade levels in Turkey and four grade levels in Russia, the total number of hours in Turkey was higher.

Similarities and Differences in Turkish and Russian Textbooks

Introduction and contents of textbooks

Data for the introduction and contents sections of the textbooks "Life Science" in Turkey and "The World Around" in Russia are given in Figures 2-7.

Figure 2.

Turkish Life Science textbooks (Celikbas, Gurel & Ozcan, 2018; Demir, 2018; Kuskaya, 2018)



1st, 2nd, and 3rd grades of "Life Science" textbooks taught in the 2019-2020 academic year in Turkey are included in Figure 2. These books included "Kök, SDR Ipek Yolu, and Ministry of Education" publications. At the beginning of Turkish life science textbooks, there was a section of 'Contents' (see Figure 3).

Figure 3.

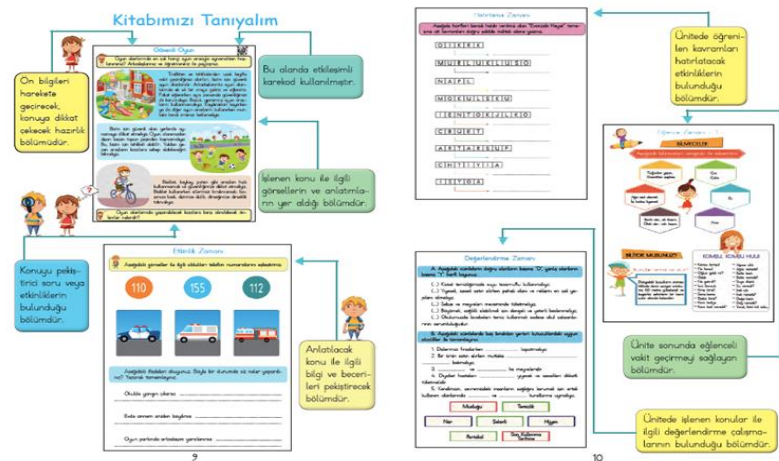
"Life Science" Textbook Contents Section (Celikbas, Gurel & Ozcan, 2018)

İÇİNDEKİLER	
1. ÜNİTE - OKULUMUZDA HAYAT	
• Farklı Temalar	12
• Dersimizin Hedefleri Nedir?	14
• Arkadaşlarımızla Birlikte Çalışalım	16
• Arkadaşlarımızla Birlikte Çalışalım	18
• Arkadaşlarımızla Birlikte Çalışalım	22
• Arkadaşlarımızla Birlikte Çalışalım	24
• Arkadaşlarımızla Birlikte Çalışalım	26
• Arkadaşlarımızla Birlikte Çalışalım	28
• Arkadaşlarımızla Birlikte Çalışalım	30
• Arkadaşlarımızla Birlikte Çalışalım	32
• Arkadaşlarımızla Birlikte Çalışalım	34
• Arkadaşlarımızla Birlikte Çalışalım	36
• Arkadaşlarımızla Birlikte Çalışalım	37
• Arkadaşlarımızla Birlikte Çalışalım	38
• Arkadaşlarımızla Birlikte Çalışalım	41
• Arkadaşlarımızla Birlikte Çalışalım	42
• Arkadaşlarımızla Birlikte Çalışalım	43
• Arkadaşlarımızla Birlikte Çalışalım	44
2. ÜNİTE - EVİMİZDE HAYAT	
• Evimizdeki Hayat	46
• Evimizdeki Hayat	48
• Evimizdeki Hayat	50
• Evimizdeki Hayat	52
• Evimizdeki Hayat	54
• Evimizdeki Hayat	56
• Evimizdeki Hayat	58
• Evimizdeki Hayat	62
• Evimizdeki Hayat	66
• Evimizdeki Hayat	69
• Evimizdeki Hayat	71
• Evimizdeki Hayat	73
• Evimizdeki Hayat	74
• Evimizdeki Hayat	75
• Evimizdeki Hayat	76
3. ÜNİTE - SAĞLIKLI HAYAT	
• Sağlıklı Yaşam	78
• Sağlıklı Yaşam	80
• Sağlıklı Yaşam	82
• Sağlıklı Yaşam	84
• Sağlıklı Yaşam	86
• Sağlıklı Yaşam	88
• Sağlıklı Yaşam	89
• Sağlıklı Yaşam	92
4. ÜNİTE - GÜVENLİ HAYAT	
• Güvenli Yaşam	94
• Güvenli Yaşam	96
• Güvenli Yaşam	98
• Güvenli Yaşam	100
• Güvenli Yaşam	102
• Güvenli Yaşam	104
• Güvenli Yaşam	106
• Güvenli Yaşam	110
• Güvenli Yaşam	112
• Güvenli Yaşam	113
• Güvenli Yaşam	114
• Güvenli Yaşam	116
5. ÜNİTE - ÜLKEMİZDE HAYAT	
• Ülkemizdeki Hayat	118
• Ülkemizdeki Hayat	120
• Ülkemizdeki Hayat	124
• Ülkemizdeki Hayat	128
• Ülkemizdeki Hayat	130
6. ÜNİTE - DOĞADA HAYAT	
• Doğadaki Hayat	134
• Doğadaki Hayat	136
• Doğadaki Hayat	142
• Doğadaki Hayat	146
• Doğadaki Hayat	148
• Doğadaki Hayat	150
• Doğadaki Hayat	151
• Doğadaki Hayat	152
• Doğadaki Hayat	153
• Doğadaki Hayat	154

In the life science course in Turkey, there were six units in each of the 1st, 2nd and 3rd grades in the form of 'life in our school, life in our home, Healthy Life, Safe Life, Life in our country and life in nature.' While the subjects in these units changed at each grade level, the unit names remained the same. In Figure 3, Elementary School 3, the 'contents' section of the classroom Life Information textbook, which was shaped in this mentioned form, was included. After this part, the 'Let's get to know our book' section was included in Turkish life science textbooks (Figure 4).

Figure 4.

Let's Get to Know Our Book "Life Science" Section (Celikbas, Gurel & Ozcan, 2018)



As can be seen in Figure 4, at the beginning of the Turkish Life Science textbook was the section Let's get to know our book. In this section, the preparation section, which

would activate the preliminary information on the topics and draw attention to the subject, the sections with questions or activities that reinforce the subject are introduced. In addition, there were promotional sections related to the activity and evaluation sections. "The World Around" textbooks taught in the 2019-2020 academic year in Russia are included in Figure 5.

Figure 5.

The World Around 1st, 2nd, 3rd and 4th-grade textbooks (Плешаков, 2013)



"The World Around" course in Russia, elementary schools 1st, 2nd, 3rd and 4th-grade books consisted of two sections at each grade level (Плешаков, 2013). Unlike in Turkey, Primary School 4, this course was also taught in the classroom. In Turkey, the primary school was transitioning to Social Studies in four classes. On the home page of Russian textbooks, there were symbols, such as the following.

Figure 6.

Textbook introduction page of The World Around (Плешаков, 2013)



The symbols on the introduction page of the textbook "The World Around" in Figure 6 describe the following elements.



- "What we know, what we will learn", symbolized by "The Question of Ant"



- We're working with a group of two



- Working with group



- Working with adults



- Modelling



- Workbook



-Atlas of identification, called "from Earth to Sky"



- "Let's draw conclusions" part symbolized by the turtle

In the parts seen in the symbols, the animals that children might encounter in their lives were reflected with the symbols of Ant and Turtle. Thus, children who knew beforehand what the symbols they encountered knew that they would activate their pre-knowledge with the "What we know, what we will learn" part and realized that they would make an evaluation about the subject they deal with with the "Let's draw conclusions" part. In Figure 7, "The World Around" course is mentioned on the unit introduction page of the 1st-grade textbook.

Figure 7.

The World Around First Grade Textbook Unit Introduction Page (Плешаков, 2013).



Examining the fields on the unit home page, the first unit, "Who and What?," it was seen that the items to be learned were included in the unit. These are as follows:

- To separate the flag and coat of arms of Russia
- Getting to know some of the capital's cultural heritage
- Crossing the street properly and smoothly
- Observing the world around us
- To distinguish learned stones, plants, animals and constellations
- Identifying animals and plants using Atlas
- Identify tree, fish, bird according to plan
- Comparing plants and animals and placing them in groups to which they belong
- Using the sphere to describe the shape of our World
- Modeling the sun and its constellations

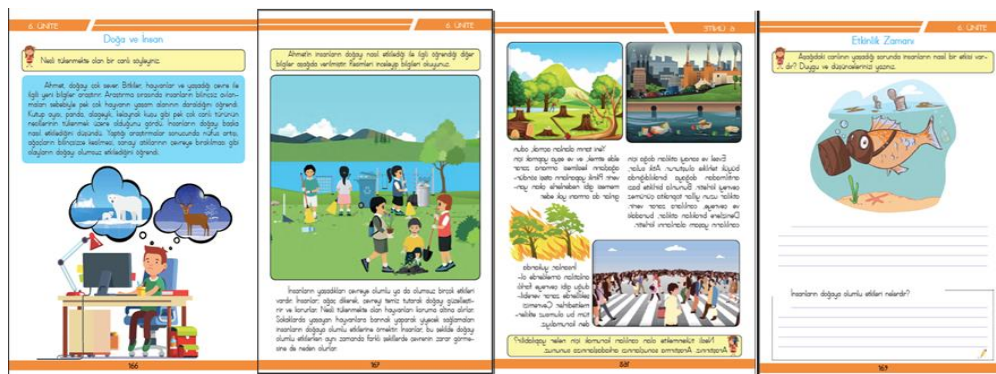
While a summary of the topics in the whole book was included in the contents section of the Turkish textbooks, it was determined that the topics to be covered at the beginning of each unit in the Russian textbook were discussed separately.

Presentations of the same topic in two country textbooks

A topic related to "Protecting Nature" was selected from Turkish and Russian textbooks, and how this topic was handled in both countries was examined. Figure 8 Turkey "Life Science" is given to the shape processing in the textbook.

Figure 8.

Life Sciences courses 3rd grade 'Nature and Human' subject (Celikbas, Gurel & Ozcan, 2018, pp. 166-169)



When we look at the shape of the Life Science course in Turkey Human Nature and the handling of issues, the first question was a readiness for the subject (you say endangered species extinction), the case appeared to begin with. Afterwards, students

were given pictures related to the subject and asked to construct related with them. They were asked to think about what they could do to protect endangered creatures and conduct research on this issue. After presenting the research results, the subject was completed by giving an activity. In the event, a picture of a fish that cannot breathe due to sea pollution was given. They were asked to write down their thoughts on what effect people had on the situation in this picture. The presentation of the same subject in Russian "The World Around" textbook is given in Figure 9.

Figure 9.

The World Around Course 2nd grade "Become a Friend to Nature" subject (Плешаков, 2013, pp. 92-95).



It was determined that a subject in the dimensions of planning, implementation and evaluation was covered in the "The World Around" course. Accordingly, in the planning part, which behaviors of people destroy nature and help protect nature were discussed. It was stated that the rules of nature friends and reading and drawing environmental signs would be included. Then, "Why shouldn't we pick flowers or catch butterflies? Why should we be quiet in the forest?" They were asked to think about the answers to such questions. By examining the scheme, they were asked to explain that animals and plants are found less and less in nature. In the application part, figures were given to show that two children form rules for nature and draw ecological signs. A few of them were as follows and they were asked to learn them.



Do not pluck the flowers. Keep beautiful plants in nature!



Let's not break the branches of trees and bushes!

In the evaluation part, the subject was ended by asking questions like the following.

- For which other creatures in nature, we can create such ecological signs. Think and draw signs for these rules.
- What could be the main reasons for the decrease in the number of plants and animals?
- Which of the rules of nature's friends did you agree to follow? Will you use it in your life from now on?

When examined textbooks in Russia and Turkey, "the Nature and Human, Nature Friend" issues in the overall properties close to each other (events, questions and texts), it was found to be processed. However, according to Turkey in the Russian textbook, the course was finished with more realistic and concrete images. This situation can be effective for the child to relate the subject to real life.

Conclusion, Discussion and Suggestions

In this study, a comparison of the Russian "The World Around" and Turkish "Life Science" Curriculum and textbooks was made. In light of the findings obtained in this study, the goals/ objectives of the curriculum, the ways in which the values are reflected, the units, the achievements and the differences in the course hours were discussed.

Accordingly, when the reflection of the general aims and detailed aims in the curriculum is examined, for both countries, it has been seen that it is aimed to develop positive attitudes of the individual about himself, his family, society and country. However, the initial objectives set in the textbooks in Turkey, "recognizes that the environment and life itself." while in shape; In Russia, "it creates an attitude that respects the family, society, region, Russia, history, culture, nature of the country and modern life." in the form. As a result of this situation, it can be concluded that the knowledge acquired by Russian students in this course is more universal than Turkish students. In the study of Akhan and Cicek (2019), one of the studies supporting this situation, "good citizen perceptions" of Turkish and Russian secondary school students were revealed. It has been determined that Turkish students express good citizenship in a more nationalistic way, and Russian students in a more universal way, as libertarian people who do good deeds for the country and the world. In this case, Turkey and it expressed in the work program to be dependent on social information processing in Russia. Also, in Akhan et al.'s (2019) study, it appears that Russia's social studies curriculum takes place in the form of a universal citizens by raising Turkey. This situation, namely the fact that Russia refrains from emphasizing the local because of its more cosmopolitan public structure can be explained by the understanding of uniting different ethnic origins around the understanding of universality.

When the value of expressed through speaking, Life Science in Turkey teaching program in the 'root values', which means 'justice, friendship, honesty, self-control, patience, respect, love, responsibility, patriotism, benevolence' was determined to get

the form. However, it is seen that values are handled together with their explanations in the Russian curriculum.

Life Science courses at all grade levels in Turkey are in the same unit, in Russia, "The World Around" courses, it is seen that each grade level found in the names of different units. However, as a general unit of Life Sciences in Turkey shows similarities with the course subject. Also, in the three grade levels in Turkey, despite being taught at four grade levels in Russia, the number of hours in Turkey were determined more. This situation is similar to the Social Studies course, as can be seen in the study of Akhan et al. (2019). Concerning subject content and time, it is seen that Turkey is more comprehensive than Russia.

In the curriculum of the "The World Around" course in Russia, "personal gains and interdisciplinary achievements" in the basic education program are included before the learning outcomes. Then, 'special achievements' for the "The World Around" course are included. Located gains in Life Science course in Turkey show a more national structure by Russia. The acquisitions in the Russian textbook are more universal. The results that support this situation are achieved in the studies of Akhan and Cicek (2019) and Akhan et al (2019).

In the present study, textbook in Russia and in Turkey covers textbooks, contents and introduction pages, Let's get to know the book sections and the ways in which the same two subjects are handled were examined. At the beginning of the Turkish Life Sciences textbook, there is a section, Let's get to know our book. In this section, the preparatory section, which will activate the preliminary information on the topics and draw attention to the subject, the sections with reinforcing questions or activities are introduced. In addition, there are promotional sections related to the activity and evaluation sections. In the Russian textbook, the animals that children may encounter in their real lives are projected with the symbols of Ant and Turtle. Thus, children who know beforehand what the symbols they encounter know that they will activate their pre-knowledge with the "What we know, what we will learn" part and realize that they will make an evaluation about the subject they deal with with the "Let's draw conclusions" part.

When Turkey and in textbooks in Russia the same topic handled the investigation, 'with Nature and Human, Nature Friend' issues, in general, is closely adjoining properties (activity, questions and texts) it has been found to be processed. However, according to Russian textbooks in Turkey, it is the more realistic and concrete images processed with various schemes courses. This situation is effective for the child to relate the subject to real life and to embody the information. A similar situation was encountered in the studies of Tural et al. (2017) and Pamuk and Pamuk's studies (2016). In these studies, the concreting of Turkey in their lives based on visual information more widely used as textbooks in Germany and reached a conclusion committed to the process-oriented course.

As a result, it was determined that Turkish and Russian Life Sciences teaching programs and textbooks are similar in general structure, but there are some differences

concerning content. The main conclusion to be drawn here is that it would be more appropriate to integrate some activities and methods that will bring the student closer to real life into Turkish Life Sciences textbooks. Similar expressions are seen in Pamuk's (2020) study regarding this issue. In the German Life Sciences textbook, it is stated that local history, the history of the place, social history, the history of daily life, the history of objects/objects are frequently used. It has been stated that the use of such methods for teaching history in Turkish Life Sciences course is important to achieve more qualified results in keeping historical and cultural values alive. For this reason, in future studies, it can be examined whether these methods are really effective in various aspects by conducting action research for the courses in which these methods are used or not.

This study data collection tool were limited to document review. Only the situation existing in the teaching programs and textbooks has been tried to be put forward holistically. In the following studies, longitudinal studies can be conducted to examine the development of Russian and Turkish children from the 1st to the 4th grade in the teaching of Life Sciences courses. Thus, more definite conclusions can be reached about the quality of Life Sciences courses taught in two countries.

References

- Akar, H. (2019). Durum calismasi. Saban, A. ve Ersoy, A. (Ed.) *Egitimde nitel arastirma desenleri* (3. Baskı). Ankara: Anı.
- Akhan, N. E., ve Cicek, S. (2019). Karsilastirmali sosyal bilgiler öğretimine bir örnek: Türk ve Rus ortaokul öğrencilerinin "iyi vatandaşlık algıları". *Bayburt Eğitim Fakültesi Dergisi*, 14(27), 177-195.
- Akhan, O., Babaev, A., ve Yalcin, A. (2019). Karsilastirmali sosyal bilgiler öğretimine bir örnek: Türkiye ve Rusya sosyal bilgiler programları. *Uluslararası Sosyal Araştırmalar Dergisi*, 12(63), 746-762.
- Baysal, Z. N., Tezcan, Ö., ve Arac, K. E. (2018). Comparison of life science courses in Turkey and Germany-Hamburg: a general outlook. *Journal of Theoretical Educational Science*, 11(1), 117-134.
- Karakuyu, M., ve Sariusta, F. (2013). Farklı ülkelerde coğrafya eğitimi ve öğretimi. Özey, R., Kilinc, Y., Ates, M. (Ed.). *Rusya Federasyonu eğitim sistemi ve coğrafya eğitimi*. Ankara: Pegem.
- Memmedova-Telci, A. (2011). Rusya eğitim sistemi. Balci, A. (Ed.) *Karsilastirmali eğitim sistemleri*. Ankara: Pegem.
- Merey, Z., Kus, Z. ve Karatekin, K. (2012). Tuurkiye ve ABD ilköğretim sosyal bilgiler öğretim programlarının degerler eğitimi acısından karsilastirilmesi. *Kuram ve Uygulamada Eğitim Bilimleri*, 12(2), 1613-1632.
- Merriam, S. B. (2015). *Nitel arastirma: Desen ve uygulama için bir rehber*. Turan, S. (Cev. Ed.). Ankara: Anı.
- Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook qualitative data analysis*. London: Sage.
- Minaeva E.V., Ivanova N. I., & Tarasova S. P. (2016). Possible curriculum in math school in Russia and school 2100 for the formation of universal educational actions planning of junior schoolchildren. *International Journal of Applied and Fundamental Research*, 12, 1532-1535.
- Ministry of National Education (MoNE), (2018). *İlkokul 1, 2, 3. sınıflar hayat bilgisi dersi öğretim programı*. Ankara: Milli Eğitim.
- Osmanoglu, A. E., ve Yildirim, G. (2013). Misir ve Türkiye 6. sinif sosyal bilgiler öğretim programları karsilastirmasi. *Turkish Studies*, 8(6), 511-535.
- Ozturk, F. Z., ve Ozturk, T. (2013). Kanada (Ontario) sosyal bilgiler öğretim programi ve bu programin Türkiye sosyal bilgiler öğretim programıyla karsilastirmasi.. *Adiyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (Sosyal Bilgiler Öğretimi Özel Sayisi)*, 6(14), 485-514.
- Paker, T. (2015). Durum çalışması. Seggie, F. N., Bayyurt Y. (Ed.). *Nitel arastirma: yöntem, teknik, analiz ve yaklaşımlari* (s.119-135). Ankara: Anı.
- Pamuk, İ. (2020). The use of history in life studies textbooks in Germany. *Turkish History Education Journal*, 9(1), 209-231.
- Pamuk, İ., ve Pamuk, A. (2016). Almanya'da sachununterricht ve Türkiye'de hayat bilgisi ders kitaplarında okulda demokrasi uygulamalarına örnek olarak sınıf başkanı seçimi. *Cumhuriyet International Journal of Education*, 5(2), 67-83.
- Patton, M. Q., (2014). *Nitel arastirma ve degerlendirme yöntemleri*. Bütün, M., Demir, S. B. (Cev. Ed.). Ankara: Pegem.
- Seker, M. (2014). Singapur sosyal bilgiler öğretim programı ve bu programın Türkiye sosyal bilgiler öğretim programi ile karsilastirilmesi. *Turkish Studies*, 9(2), 1417-1439.
- Tural, A., Sahan, G., İsik, A. D., Ozdemir, S., Uysal, H., ve Yilmaz, O. (2017). Türkiye ve Almanya'daki hayat bilgisi ders kitaplarının resim-metin ilişkileri ve kullanimleri bakımından karsilastirmasi. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 6(2), 770-782.
- Turkoglu, A. (1998). *Karsilastirmali eğitim dünya ülkelerinden örneklerle*. Adana: Baki.
- Yazici, K. (2009). Yeni zelanda sosyal bilgiler öğretim programi ve bu programin Türkiye'deki sosyal bilgiler öğretim programi ile karsilastirilmesi. *Selcuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 22, 423-435.
- Yildirim, A., ve Simsek, H. (2013). *Sosyal bilimlerde nitel arastirma yöntemleri*. Ankara: Seckin.
- Yin, R. K. (1984) *Case study research: design and methods*. Beverly Hills, California: Sage.

- Айвазян, Н. С. (2016). Сравнительный анализ методик обучения младших школьников решению текстовых задач. *Гаудеамус*, 15(3), 54-61.
- Долгова, В. И., & Цветкова, Н. В. (2014). Влияние системы обучения младших школьников на формирование межличностной рефлексии в подростковом возрасте. *Вестник Южно-Уральского государственного гуманитарно-педагогического университета*, 7, 89-98.
- Плешаков, А. А. (2013). *Окружающий мир. Рабочие программы: 1-4 кл.* М.: Просвещение.
- Смирнова, А. С. (2018). Сравнительный Анализ Программ И Учебников Математики Для Начальной Школы С Точки Зрения Особенности Формирования Познавательных Универсальных Учебных Действий, *Информация Как Двигатель Научного Прогресса*, 65-67.
- Фгос ноо, (2011). *Федеральный государственный образовательный стандарт начального общего образования: текст с изм.* М-во образования и науки Рос. Федерации. М.: Просвещение.

The Turkish Textbooks

- Celikbas, E., Gurel, F., ve Ozcan, N. (2018). *İlkokul hayat bilgisi ders kitabı 3. sınıf*. Ankara: MEB.
- Demir, E. (2018). *İlkokul hayat bilgisi ders kitabı 1. sınıf*. Ankara: Kök-e.
- Kuskaya, C. (2018). *İlkokul hayat bilgisi ders kitabı 2. sınıf*. Ankara. SDR İpekyolu.

The Russian Textbooks

- Плешаков А. А. (2013). *Окружающий мир. Учеб. 1 кл. В 2 ч. Ч. 1.* М.: Просвещение.
- Плешаков А. А. (2013). *Окружающий мир. Учеб. 1 кл. В 2 ч. Ч. 2.* М.: Просвещение.
- Плешаков А. А. (2013). *Окружающий мир. Учеб. 2 кл. В 2 ч. Ч. 1.* М.: Просвещение.
- Плешаков А. А. (2013). *Окружающий мир. Учеб. 2 кл. В 2 ч. Ч. 2.* М.: Просвещение.
- Плешаков А. А. (2013). *Окружающий мир. Учеб. 3 кл. В 2 ч. Ч. 1.* М.: Просвещение.
- Плешаков А. А. (2013). *Окружающий мир. Учеб. 3 кл. В 2 ч. Ч. 2.* М.: Просвещение.
- Плешаков А. А., Крючкова Е. А. (2013). *Окружающий мир. Учеб. 4 кл. В 2 ч. Ч. 1.* М.: Просвещение.
- Плешаков А. А., Крючкова Е. А. (2013). *Окружающий мир. Учеб. 4 кл. В 2 ч. Ч. 2.* М.: Просвещение, 2013.

Authors

Contact

Nur ÜTKÜR GÜLLÜHAN
Primary Education, Life Studies Education,
Social Studies Education.

Assoc. Prof. Dr., Istanbul University-
Cerrahpaşa, Hasan Ali Yucel Faculty of
Education, Department of Primary School,
Buyukcekmece/ISTANBUL

E-mail: nur.utkur@iuc.edu.tr

Elvira GUSEINOVA
Life Studies Education, Systems of different
countries.

Graduate student, Istanbul University-
Cerrahpaşa, Graduate Education Institute,
Avcilar/ISTANBUL

E-mail: elviraguseynova1990@mail.ru