



Analysis of the 5th Grade Social Studies Course Book in Terms of Interdisciplinary Approach

Elif ALADAĞ¹, Cansu SERT²

Abstract

Interdisciplinary instruction is the conceptual integration of a concept across different disciplines. This integration allows students to learn topics in connection with different courses and in a meaningful manner. Interdisciplinary instruction is an approach which helps students combine and integrate pieces of information existing in different fields and enables students, through concepts, to focus on thoughts at the level of analysis and synthesis. The inclusion of interrelations in curriculum into course book is important to reaching achievements set forth in these programs. This research aimed to reveal that establishing relations between courses (Turkish Language, Mathematics and Science) referred to in social studies instruction program happened to be the case in the 5th grade social studies course book in what sense and through which elements. By using the criterion sampling, the 5th grade, the grade level at which the establishment of relationships between courses was the most common, and achievements for establishing relationships were selected in the study. In the study, qualitative research method was employed. Data were collected through document analysis and evaluated through content analysis. In the data analysis process, firstly, achievements which established relationships with other courses were identified. For the data analysis, a table of criteria was created, and the analysis process was launched in light of the categorization of images, written materials and questions which were presented on this table. Codes were created as to how achievements which established relationships with courses of Turkish language, mathematics and science were included in social studies course book, and codes considered to be related to each other were synthesized and categorized into themes. Also, a social studies teacher who was experienced in qualitative research was included into the analysis process, and it was checked if researchers and social studies teacher had consensus on the access to codes and themes. As per research results, in social studies curriculum for the 5th grade of primary schools, three achievements were proposed for establishing relationships with Turkish language course and relationships for all three achievements were included in the social studies course book, one achievement was proposed for establishing relationship with science course and this relationship was included in the social studies course book, five achievements were proposed for establishing relationships with mathematics course and all relationships for achievements, except one achievement, were included in social studies course book. Relationships between courses were established through questions, written materials or images in social studies course book. At the end of the research, recommendations were presented for specialists, practitioner teachers and researchers in charge of preparing course books.

Keywords

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¹ Assoc. Prof. Dr., Adnan Menderes University, Turkey, ealadag@adu.edu.tr, <https://orcid.org/0000-0003-1648-2545>

² Teacher, Ministry of National Education, Turkey, cansusert24@hotmail.com, <https://orcid.org/0000-0001-8961-7063>

Introduction

One of the objectives of education is to enhance students' skills in high level thinking and to raise individuals with the capability to look at cases from different perspectives. In the stage which is called as the information society, raising individuals who just memorize some pieces of information and use this information base in examinations offers neither individual nor societal benefit. Therefore, it is essential to transfer what is learnt at school to the daily life. This, however, can be made possible only through the establishment of relationships between information learnt in different courses at schools. The arrangement of a multi-disciplinary teaching & learning environment will empower students to look at cases or situations from a holistic perspective (Karakuş & Aslan, 2016; Kılcan, 2005). This, in return, necessitates placing the focus more on interdisciplinary instruction.

Interdisciplinary instruction is the conceptual integration of a concept across different disciplines (Duman & Aybek, 2003, p. 5, cited from Erickson, 1995). Interdisciplinary instruction is an approach which helps students combine and integrate pieces of information existing in different fields and enables them, through concepts, to focus on thoughts at the level of analysis and synthesis. Interdisciplinary instruction is not the case of studying mathematics in a part of the school hour, Turkish language and science in other parts of the same school hour (Yıldırım, 1996). In the interdisciplinary approach, it is essential that programs have flexibility, interrelated topics be combined, emphasis be placed on theme-based units and student groups be created upon the analysis of various resources (Yarımca, 2011).

The field of social studies is an area composed via the integration of literature, arts and social sciences through an interdisciplinary approach so as to equip students with qualifications essential to citizenship. In the instruction program, the field of social studies offers a systematic and cooperative area of study distilled from proper and relevant contents of archeology, economics, anthropology, geography, philosophy, law, political science, psychology, religion, sociology & arts, literature, mathematics and natural sciences (Doğanay, 2002, p.16, cited from NCSS, 1993). Students who are highlighted in the definition and are desired to be raised are creative and questioning individuals who are endowed with skills and values appertaining to social sciences and also capable of incorporating different sciences in a systematic manner so as to produce new information.

Of the three basic approaches in the instruction of social studies, the reflective teaching approach is significant as it establishes connections between courses and places problems at the center. As per this approach, rather than teaching the chronology of cases or contents of diverse disciplines, an instruction program placing the focus on problems and topics is more valuable to the promotion of effective citizenship (Aslan, 2016, p. 40, cited from Barr, Barth & Shermis, 1978). It will be discerned that establishing relationships with other courses and adopting a holistic perspective in social studies instruction coincide with objectives of reflective teaching since interdisciplinary instruction is based on cases or problems.

There exist references to connections between courses in social studies curriculum first prepared in 2005 and then updated in 2018. In the part introducing the application of social studies curriculum, the following references to relationships are made: Teacher is faced with three types of relationships across the program, that is, relationships established between units inside the course, relationships established with other courses and relationships established with interdisciplines (Ministry of National Education of Turkey/MNET, 2005). In social studies curriculum updated in 2018, even though there is no direct reference to the establishment of relationships between courses, there exist suggestions which allow the establishment of relationships with other courses under the titles of skills and competencies that should be taught in social studies course. Basic skills covered by achievements which were included in curriculum were addressed on the basis of Turkish Qualifications Framework (TQF). Of eight key qualifications which each individual is supposed to obtain in the context of life-long learning according to the TQF, education in mother tongue necessitates the establishment of relationships with Turkish language course and the subject title called Mathematical Qualifications requires the establishment of relationships with mathematics course (MNET, 2018).

Course books are utilized as the most fundamental materials in Turkey as in the case of several other countries, and, on the basis of these course books, teachers plan numerous activities to be

performed in the classroom (Kılıç & Seven, 2008). If factors such as skills, values and relationships between courses which are emphasized in the course instruction program are not sufficiently addressed in course books, the course program will fail to reach its objective precisely. Moreover, studying topics covered under social studies course by establishing relationships is essential to meaningful learning as long as these relationships coincide with achievements of other courses. In this regard, the inclusion of relationships between courses into course books is important to meaningful learning.

The goal of this research was to reveal that establishing relations between courses which were referred to in social studies curriculum was the case in social studies course book in what sense and through which elements. To this end, below questions are addressed to sub-goals of this study:

1. How is the relationship with Turkish language course reflected in the 5th grade social studies course book?
2. How is the relationship with mathematics course reflected in the 5th grade social studies course book?
3. How is the relationship with science course reflected in the 5th grade social studies course book?

Methodology

This is a qualitative study in which social studies course books are analyzed in terms of their interdisciplinary approach. In the research, document analysis was employed. Document analysis covers the analysis of written materials which include information on phenomena and cases intended to be studied (Yıldırım & Şimşek, 2005; Karasar, 2014, p.183). In the study, the book which was acknowledged as the course book for the 5th grade of Turkish primary schools for five years as of the school year of 2016-2017 upon the decision by the Board of Instruction and Education of the Ministry of National Education of Turkey (Decision Date: May 25, 2015, Decision No: 34) was analyzed (MNE, 2015).

Research Sample

Of purposive sampling techniques, the criterion sampling was utilized in the study. Purposive sampling offers the opportunity to undertake deep analysis of cases which are considered to be rich in information. Therefore, it is useful for the exploration and description of phenomena and cases. In criterion sampling, the researcher identifies sampling units in the context of a series of criteria specified previously (Yıldırım & Şimşek, 2005, cited from Patton, 1987). As indicated in Table 1, the reason for the selection of the 5th grade in the research pertains to the fact that the number of relationships established with other courses is the highest in this grade. This study analyzed the parts which included achievements establishing relationships with other courses in the 5th grade social studies course book.

Table 1. Number of Relationships Established with Other Courses in Social Studies Curriculum of 2005 by Grade Year

Grade year	Turkish	Math	Science	Total
5	3	6	1	10
6	-	2	3	5
7	2	1	3	6
Total	5	9	7	21

Data Collection Tool and Analysis

As the data collection tool, a criteria table was prepared. In the organization of the table of criteria, each item was created with attention paid to all elements (activity, annotation, images, questions and so on.) used for establishing relationships between courses and literature on interdisciplinary instruction. These items were arranged on the basis of views of a measurement & evaluation specialist and a specialist of social studies instruction, and the course book was analyzed as per this table of criteria. In Table 2, a sample of the table of criteria was presented.

Table 2. A sample of the table of criteria for identifying whether relationships with science course were inserted into social studies course book

	Yes	No
Relationships with Science Course was established through the following:		
1- Images		
2- Written elements		
3- Questions		
.....		

Data analysis pertains to the organization of collected data so as to develop an understanding of experiences and lessons learnt from experiences (Glesne, 2015). In this research, content analysis was employed for the examination of data. Content analysis can be utilized to reveal themes and highlight relationships between these themes which cannot be observed in collected data but can be perceived through conceptual coding and categorization, in other words, to find answers to questions of ‘why’ and ‘how’ (Yıldırım & Şimşek, 2005). In this study, social studies course book for the 5th grade of primary school was addressed. The study was performed in the school year of 2016-2017. The path to be taken in content analysis is as follows: Firstly, achievements which established relationships with other courses (Turkish language, mathematics and science) in social studies curriculum were identified. The researchers embarked on the analysis process by calling attention to the categorization of images, written elements and questions which were presented on the table of criteria. Codes were created as to how achievements establishing relationships with courses of Turkish language, mathematics and science were included in social studies course book, and codes considered to be related to each other were synthesized and categorized into themes. As themes were not specified in advance, but designated later during the analysis process by the researcher, content analysis was employed. A social studies teacher who was enrolled in graduate program of social studies instruction and took the course on qualitative research methods participated in the process of content analysis. During the phase of analysis, it was checked if researchers and social studies teacher had consensus on the access to codes and themes. Data obtained through research were presented in detail and submitted in their original forms as findings.

Findings

Findings on the 1st Sub-Goal

In the research, attempts were made in order to identify how relationships with Turkish language course were included in social studies course book in the context of the 1st sub-goal. Findings on this sub-goal were presented below:

Findings Obtained from Social Studies Course Book in Relation to Turkish Language Course

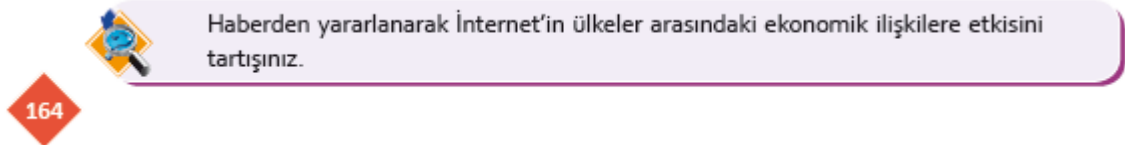
Table 3. Elements in which relationships with Turkish language course were established in the 5th grade social studies course book

Interrelated Achievements of Social Studies and Turkish Language Courses		Findings on Relationships in Social Studies Course Book
Turkey Step By Step 5. By presenting proofs, it compares the daily life in Turkey before and after the introduction of revolutions of Atatürk, the founder of the Republic of Turkey.	<input type="checkbox"/> For the 5 th achievement, area of learning of ‘Visual Reading’ of Turkish language course (2 nd , 3 rd and 6 th achievements)	Images Table and chart Inquisitive question
World of All of Us 3. It discusses the effect of communication and transportation technology on economic relations between countries.	<input type="checkbox"/> For the 3 rd achievement, area of learning of ‘Speaking’, speaking well-suited to types, methods and techniques (2 nd achievement)	Preliminary question Inquisitive question Evaluation question
Dreams Coming True 5. It recognizes and follows up periodicals which are related to science & technology and well-suited to student’s development level.	<input type="checkbox"/> For the 5 th achievement, area of learning of ‘Reading’, reading well-suited to types, methods and techniques (9 th achievement)	Preliminary question Poster images Text content

As per information on Table 3, the topic of ‘Modernizing Turkey’ of the unit titled ‘Turkey Step By Step’ is on pages 42-45 of the course book. The relationship of this topic was established with the learning area of ‘Visual Reading’ of Turkish language course. 10 images, one table and one chart which exist in social studies course book reflect the relationship supposed to be established with

Turkish language course. Of questions in the course book, an inquisitive question is relevant to the reading of data in the chart and table. In comparison to other topics covered by the course book, there are a large number of images for this topic. This can also be considered as the reflection of the establishment of relationship.

The topic of ‘Communication and Transportation in International Trade’ of the unit titled ‘World of All of Us’ is on pages 164-165. The relationship of this topic was established with the learning area of ‘Speaking’ of Turkish language course. One preliminary question, one evaluation question and one inquisitive question on the topic at the bottom of the page exist in social studies course book. The presence of various questions on this topic in the course book motivates students to have discussions on the topic. As this situation is likely to enable students to express their own views verbally, it is deduced that the relationship was established with learning area of ‘Speaking’.



Please discuss the effect of internet on economic relations between countries by utilizing the news.

Figure 1. Example of the establishment of relationship with learning area of ‘Speaking’ of Turkish language course in social studies course book

The topic of ‘Trip to the Science World Through Journals’ of the unit titled ‘Dreams Coming True’ is on page 112. At the beginning of the topic, in the form of a preliminary question, there is a question on the uses of reading journals appropriate to the development level. It was concluded that the relationship was established by this question with Turkish language course in social studies instruction program. Again, two poster images capture attention as visual elements related to journals which are supposed to be read by students.

Findings on the 2nd Sub-Goal

In the research, attempts were made in order to identify how relationships with mathematics course were included in social studies course book in the context of the 2nd sub-goal. Findings on this sub-goal were presented below:

Findings Obtained from Social Studies Course Book in Relation to Mathematics Course

Table 4. Elements in which relationships with mathematics course were established in the 5th grade social studies course book

Interrelated Achievements of Social Studies and Mathematics Courses		Findings on Relationships in Social Studies Course Book
Turkey Step By Step 5. By presenting proofs, it compares the daily life before and after the introduction of Atatürk’s revolutions	<input type="checkbox"/> For the 5 th achievement, learning sub-area of ‘Line Chart’ of mathematics course (1 st and 2 nd achievements)	Table and chart Inquisitive question
Let’s Get Acquainted With Our Region 3. It establishes relationships between locations which are densely populated by human beings residing in the region and region’s geographical characteristics.	<input type="checkbox"/> For the 3 rd achievement, learning sub-area of ‘Summation Operation With Natural Numbers’ of mathematics course (4 th achievement) <input type="checkbox"/> For the 3 rd achievement, learning sub-area of ‘Subtraction Operation With Natural Numbers’ of mathematics course (4 th achievement)	Preliminary question Inquisitive question Map legend
What We Produce 4. It offers an evaluation on the place of region’s economic activities in country’s economy.	<input type="checkbox"/> For the 4 th achievement, sub-area of learning of ‘Line Chart’ of mathematics course (1 st and 2 nd achievements)	Chart Inquisitive question
Once Country, One Flag 1. It recognizes the existence and importance of laws regulating the societal life.	<input type="checkbox"/> For the 1 st achievement, sub-area of learning of ‘Probability’ of mathematics course (3 rd achievement)	-
World of All of Us 4. It gives examples of elements of common heritage existing across several countries.	<input type="checkbox"/> For the 4 th achievement, sub-area of learning of ‘Geometrical Objects’ of mathematics course (1 st achievement)	Images Text content

The topic of ‘Modernizing Turkey’ of the unit titled ‘Turkey Step By Step’ whose relationship is established with sub-area of learning of ‘Line Chart’ of mathematics course is on pages 42-45 of the course book. In the course book, there existed a chart and again a table concerning the topic. Also, an inquisitive question likely to help the interpretation of chart and table is at the bottom right-hand corner of table and charts. Departing from these findings, it was deduced that the establishment of relationship was reflected in the course book.

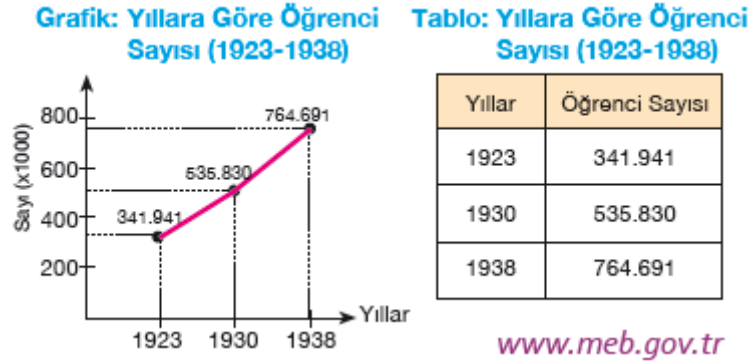


Chart: Number of Students by Year (1923-1938)

Table: Number of Students by Year (1923-1938)

Figure 2. Example of the establishment of relationship with sub-area of learning of ‘Line Chart’ of mathematics course in social studies course book

The topic of ‘Locations Where Human Beings Reside’ of the unit titled ‘Let’s Get Acquainted With Our Region’ is on pages 60-61 in social studies course book. The relationship of this topic was established with sub-areas of learning of ‘Summation Operation With Natural Numbers’ and ‘Subtraction Operation With Natural Numbers’ of mathematics course. Under the topic title, one question on the population density was asked as the preliminary question for the unit. A map showing the approximate population density of Turkish provinces in numbers was provided in a way to cover two pages of the course book. There is a legend on the map in order to indicate the value of population density in numbers expressed by symbols. It can be asserted that, on the basis of map legend, the relationship offered in the curriculum is reflected in the course book, even though indirectly, via teacher directions. At the bottom left-hand corner of the map, the most populous provinces and their populations according to the available information were provided via a table. Moreover, there is an inquisitive question on the image. So that the student can read the map, table and charts, he/she will be obliged to carry out mathematical operations with natural numbers. Departing from these findings, it is concluded that relationships with sub-areas of learning of ‘summation with natural numbers’ and ‘subtraction with natural numbers’ of mathematics course were indirectly reflected in the course book.

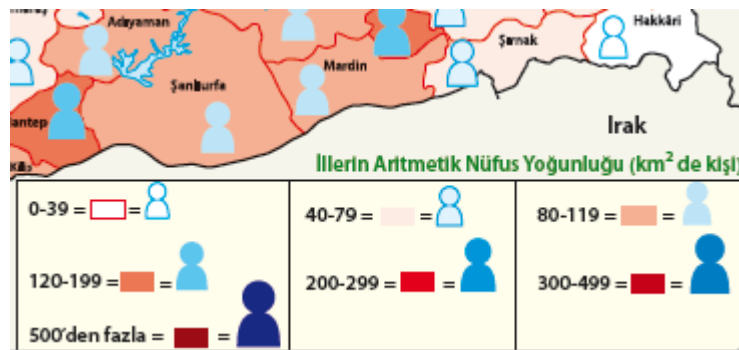


Figure 3. Example of the establishment of relationship with mathematics course in social studies course book

The topic of ‘Place of My Region’s Economy in the Country’ of the unit titled ‘What We Produce’ whose relationship is established with sub-area of learning of ‘Line Chart’ of mathematics course is on pages 88-89 in social studies course book. This topic is quite rich in terms of both its content and its images & charts in the course book. Pie charts, column charts and line charts present statistics about the topic. Departing from this point, it is deduced that the achievement whose

relationship was established with mathematics course in social studies curriculum was reflected in the course book.

The topic of ‘In Order To Live Together’ of the unit titled ‘One Country, One Flag’ is on pages 136-139 in social studies course book. The relationship of this topic was established with the sub-area of learning of ‘Probability’ of mathematics course in social studies curriculum. However, in the course book, there existed no relationship established with this topic.

The topic of ‘Common Heritage of Humankind’ of the unit titled ‘World of All of Us’ is on pages 166-169 in social studies course book. The relationship of this topic was established with sub-area of learning of ‘Geometrical Objects’ of mathematics course. There exist 12 images about the topic in the course book. By asking students to examine some of these images, it is possible to establish relationship with geometrical objects in social studies curriculum. For instance, students can be asked to make comments about the shape of pyramids through the image of Egyptian pyramids, and so relationship with mathematics course can be established. Furthermore, the text just above images of Egyptian pyramids is well-suited to the establishment of relationship with mathematics course. In other words, the establishment of relationship depends on the teacher. Therefore, it is deduced that images partially provided the establishment of relationship.

Mısır Piramitleri, firavunların mezarı olarak inşa edilmiş, yüzeyleri üçgensel bölgelerden oluşan piramit şeklindeki yapılardır. Aşağıdaki görselde dünyanın en büyük piramidi olan Keops’un yer aldığı Gize Piramitleri görülmektedir.



Gize Piramitleri, Mısır

Figure 4. Example of the establishment of relationship with sub-area of learning of ‘Geometrical Objects’ of mathematics course in social studies course book, p. 166.

Findings on the 3rd Sub-Goal

In the research, attempts were made in order to identify how relationships with science course were included in social studies course book in the context of the 3rd sub-goal. Findings on this sub-goal were presented below:

Findings Obtained from Social Studies Course Book in Relation to Science Course

Table 5. Elements in which relationships with science course were established in the 5th grade social studies course book

Interrelated Achievements of Social Studies and Science Courses	Findings on Relationships in Social Studies Course Book
<p>Let’s Get Acquainted With Our Region</p> <p>2. It explains the effect of climate which is dominant in the region on human activities by giving examples from daily life.</p>	<p>☐ For the 2nd achievement, unit titled ‘Change of Matter and Its Identification’ of Science and Technology Course (1. 1 achievements)</p>
	<p>Preliminary question, Image, Annotation</p>

The topic of ‘Climate and Human Life’ of the unit titled ‘Let’s Get Acquainted With Our Region’ is on pages 58-59 in social studies course book, and the relationship of this topic was established with the unit titled ‘Change of Matter and Its Identification’ of Science and Technology

Course. One of the preliminary questions pertains to air temperature and is important as it prepares the student for the relationship to be established with science topics. In the section reserved for annotation which presents the most essential information on the topic, there exists one annotation for the achievement, the relationship of which is established with science as per the social studies instruction program. This annotation is about a science term, and its presence in social studies course book reflects the establishment of relationship.

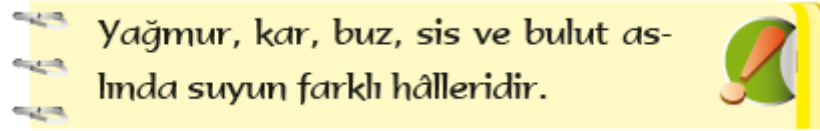


Figure 5. Example of the establishment of relationship with the unit titled ‘Change of Matter and Its Identification’ of Science and Technology Course in social studies course book

Discussion, Results and Recommendations

In this research, the 5th grade social studies course book was analyzed in terms of interdisciplinary approach which is well-suited to the modern understanding of education. As per research results, in social studies curriculum for the 5th grade of primary school, three achievements were proposed for establishing relationships with Turkish language course and relationships for all three achievements were included in the social studies course book. One achievement was proposed for establishing relationship with science course and this relationship was included in the social studies course book. Five achievements were proposed for establishing relationships with mathematics course and relationships for all achievements, except one achievement, were included in social studies course book. Relationships between courses were established through questions, written materials or images in social studies course book.

Interdisciplinary relationship which is intended to be established between the topic of ‘Modernizing Turkey’ of social studies course and the area of learning of ‘Visual Reading’ of Turkish language course is included in social studies course book. Elements establishing the relationship on this topic are images, table & charts and inquisitive questions. In courses like social studies course which frequently necessitates the delivery of content verbally, content which is delivered with images is likely to be more practical and long-lasting for students. Therefore, visual reading is an area for establishing relationship with Turkish language course. Visual reading is the area which gets progressively more important and receives acknowledgement as the fast development of tools such as TV and computer changes the learning style of individuals, and most people prefer acquiring information through visual instruments to reading written documents. Along with the thinking that this would be more common in the future, Visual Reading and Visual Presentation were for the first time addressed as a separate area of learning in Turkish Language Curriculum of 2005 for the 1st to 5th grades (Güneş, 2013).

Interdisciplinary relationship which is intended to be established between the topic of ‘Trip to the Science World Through Journals’ of social studies course and the area of learning of ‘Reading’ of Turkish language course is included in social studies course book. Elements establishing the relationship on this topic are the preliminary question, poster images and text content. One of the reasons for students not to be interested in activities conducted for the enhancement of language skills pertains to that such activities are performed in isolation from other areas. It is inconceivable to anticipate success in such activities or courses in which students adopt negative attitudes. In this situation, the way to make students enjoy such activities is to incorporate language activities into other areas, and it will be reasonable to make attempts to encourage students to like activities that they dislike by establishing connections with different courses and receiving support from other courses enjoyed by them (Öztürk, Keskin & Otluoğlu, 2014). As it is likely that the establishment of relationships between Turkish language and social studies courses will raise the interest of students in these courses, including such activities in course books becomes crucial.

Interdisciplinary relationship which is intended to be established between the topic of ‘Communication and Transportation in International Trade’ of social studies course and the area of learning of ‘Speaking’ of Turkish language course is included in social studies course book. Elements

establishing the relationship on this topic are the preliminary question, inquisitive question and evaluation question. Achievements of social studies course pertain to processes such as reading, understanding and comprehending, and these achievements can be attained via proficiency in language skills. Skills in Turkish language such as reading, speaking and writing are important to the development of competencies like expressing yourself under the topic of communication in social studies course. Moreover, upon the review of primary school instruction programs, it is discerned that the skill covered by all courses is the skill in successful and effective use of Turkish language. The basis of this is about understanding the mother tongue perfectly and thus developing the capability to understand all that are lectured in each course. Just as Turkish language course is addressed in relationships established with other courses, addressing it in a relationship to be established with social studies course is important (Kanatlı & Çekici, 2013).

Interdisciplinary relationship which is intended to be established between the topic of ‘Modernizing Turkey’ of social studies course and the sub-area of learning of ‘Line Chart’ of mathematics course is included in social studies course book in the form of charts and inquisitive questions. However, charts and tables are small in size and this situation makes it difficult to analyze the charts. Even if this is all about the physical feature of the course book, it is referred to as a finding because it affects the content and research topic. This chart and table pertain to both the relationship established with mathematics course and the relationship established with visual reading in Turkish language course. That is why, the examination of images is quite important hereby. In the study by Aladağ and Şahinkaya (2013), almost half of prospective social studies and primary school teachers reported that it was difficult to establish relationship between the achievement which stated that “By presenting proofs, it compares the daily life in Turkey before and after the introduction of Atatürk’s revolutions.” and the achievement obtained from the sub-area of learning of ‘Line Chart’ of mathematics course. Thus, so as to facilitate the establishment of relationship, it is thought that it is important to include activities which will assure the establishment of this relationship between mathematics and social studies courses in course books and student workbooks.

The relationship between the topic of ‘Locations Where Human Beings Live’ of social studies course and sub-areas of learning of ‘Summation Operation with Natural Numbers’ and ‘Subtraction Operation with Natural Numbers’ of mathematics course is established in social studies curriculum. However, it is deduced that this relationship is indirectly included in the course book which is analyzed.

Interdisciplinary relationship which is intended to be established between the topic of ‘Place of Region’s Economy in the Country’ of social studies course and the sub-area of learning of ‘Line Chart’ of mathematics course is included in social studies course book. The relationship on this topic was established with chart and inquisitive questions. The relationship between the topic of ‘In Order to Live Together’ of social studies course and the sub-area of learning of ‘Probability’ of mathematics course is established in social studies curriculum. However, in the course book, there was no finding indicating the establishment of relationship between these achievements.

Elements which are supposed to establish the relationship between the sub-area of learning of ‘Geometrical Objects’ of mathematics course and the topic of ‘Common Heritage of Humankind’ of the unit titled ‘World of All of Us’ are partially available in social studies course book. Elements establishing the relationship on this topic in the course book are images about Egyptian pyramids and texts providing explanations on images. Information on Egyptian pyramids is presented in the text. Teacher can emphasize that students learnt characteristic features of pyramids in mathematics course or can raise questions which will enable students to use their existing knowledge base on pyramids. Thus, students will perceive that knowledge base they developed in a course would be useful in another course and throughout entire life. Teacher’s role, experiences and the level of knowledge are highly important hereby.

Interdisciplinary relationship which is intended to be established between the unit titled ‘Change of Matter and Its Identification’ of science course and the topic of ‘Climate and Human Life’ of social studies course is included in social studies course book in the form of a preliminary question and annotation. The relationship between achievements of science and social studies courses can be established on several topics not only on the topic referred to in social studies curriculum. Area of learning of ‘Science, Technology and the Society’ of social studies course and most parts of science

course are related to each other. Achievements regarding scientific process and achievements regarding science, technology and society are components of both courses (Bektaş & Çakal, 2006). In the instruction of topics addressed within the area of learning of 'Science, Technology and the Society' of social studies course, the lecturing of topics with references to science course through various examples to be given from science course is important to ensuring a meaningful learning process (İmamoğlu & Çeken, 2011). The topic of 'Climate and Human Life' in social studies course is a unit which includes information relevant to the discipline of geography. The geography is one of the most suitable disciplines, by its nature, for the establishment of interdisciplinary relationships. Geography exists just in the middle of natural sciences and social sciences and plays a connective role. The design of new primary school instruction programs was based on the interrelationship of primary school courses, and geography course was evaluated from this perspective. On the basis of its natural and human processes, geography is a discipline establishing links between natural sciences and social sciences. This situation gave rise to the inclusion of several concepts into topics covered by the science of geography. A highly large vocabulary came into existence along with the use of terms unique to both this science and other sciences. This is the basis of lecturing geography topics in courses of life sciences, natural sciences and social studies in accordance with primary school curricula (Kızılcıoğlu, 2006; Turan, 2002; Engin, Akbaş & Gençtürk, 2003). Therefore, topics and concepts such as the climate, temperature, precipitation and evaporation which make up the content of geography course are linked with science course and so both social sciences and natural sciences need to use the terms and findings of each other. The teacher who lectured on topics of geography also needs to talk about science as the discipline of geography is structured in a way directly requiring the establishment of relationships with other courses.

Recommendations

In this part, recommendations were presented for specialists, practitioner teachers and researchers in charge of preparing course books.

The area of learning of 'Reading' in Turkish language curriculum was presented as a skill supposed to be developed for succeeding in other courses and areas. Teachers of social studies and other courses should pay attention to this recommendation in their instruction programs and must guide their lectures by being aware that the development of this skill is not only the responsibility of teachers of Turkish language, but also the duty of all teachers. Besides, even if it is found that there are elements which are likely to focus the attention of students on reading in course books, there should be recommendations of books to be read by students on topics in course books. Other reading suggestions can also be made by teachers themselves.

Relationships referred to in social studies curriculum were included in the course book. Nevertheless, the establishment of most of these relationships depends solely on the emphasis to be placed on the topic by the teacher and the way in which the teacher addresses the topic. For instance, the relationship of the achievement asserting that "The student evaluates the place of region's economic activities in the economy of country." was established with the sub-area of learning of 'Line Chart' (1st and 2nd achievements) of mathematics course. These are achievements alleging that "The student creates the line chart." and "The student interprets the line chart." Even if line charts are addressed in the course book, it is necessary for teachers to be aware of this relationship and to create a setting in which students will draw line charts in the context of the topic. It is essential that teacher challenge students with guiding questions, illustrative cases or problem situations to encourage them to make comments about these charts. In other words, just including relationships in the course book is not alone satisfactory, but how the course book is utilized by the teacher as a material is also crucial. As guide books were removed from the curriculum along with the update introduced in 2018, there is no element to lead the way for the teacher in this respect. Thus, this issue can be emphasized both in pre-service and in-service educations of teachers.

Establishing relationships was evaluated on the basis of simultaneity, in other words, it was necessary to lecture simultaneously the topics in order to establish relationship between two achievements referred to in the curriculum. As the lecturing of courses with an interdisciplinary approach is important to the fulfillment of meaningful learning, it is essential to establish relationships of topics which are not lectured at the same time. In other words, the establishment of relationships not referred to in the curriculum should be undertaken by the teacher in order to make the course more

effective. When topics are addressed, the interdisciplinary approach should be taken into consideration even if it is not required either by the course book or curriculum. Even though there was no part addressing the establishment of relationships between courses in social studies curriculum updated in 2018, the importance of interdisciplinary approach was stressed in the curriculum. It is indispensable that teachers and course book authors continue to establish relationships with other courses and the life itself when they present the topics to students. In this sense, through new studies, it can be revealed to what extent social studies course books prepared on the basis of curriculum of 2018 adopt an interdisciplinary approach. Not only social studies course books, but also science, mathematics and Turkish language course books can be analyzed, and in what sense the relationships between these courses and social studies course are established can be evaluated. In order to observe the practices in social studies course at classrooms, case studies or action researches covering interdisciplinary studies can be performed.

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