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COMPARISON OF THE ACTIVITIES IN TURKISH LIFE SCIENCES COURSE BOOKS: ACTIVITY SUGGESTIONS BY TEACHERS

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Abstract: The latest changes in the primary school Life Sciences Curriculum which saw a radical change with the constructivist approach being used in education were made in 2009 and 2015 in Turkey. The first use of 2015 Curriculum was when it was used in first grades in the academic year of 2016-2017. This study aims to make a comparison between the activities in the Life Sciences textbook which started to be used in primary school first grades with the 2015 Life Sciences Curriculum and the activities in the first grade textbook that had been used according to the 2009 Life Sciences Curriculum. Another purpose of the study is that 5 classroom teachers who are teaching primary school first grades develop suggestions for new activities on the specified subjects. This study uses the document review, which is a qualitative research method, and attributes of activities in both books and teacher activities were analyzed with a content analysis. In the analysis, the themes "School is My Excitement, My Unique Home, and Yesterday, Today, Tomorrow" were included in the 2009 Life Sciences textbook whereas the 2015 Life Sciences textbook involved the units "Me and My School, My Family and Home, Healthy Life, Safe Life, I Love My Country, and Nature and Environment". It was determined that the number of attainments to be brought to the students was 292 and the number of activities was 438 in the 2009 textbook, these numbers decreased to 143 and 296 in the 2015 textbook, respectively. It was concluded in the analyses that the most used type of activity in both books were "expressing one's thoughts, value judgments, assumptions." Thus, the classroom teachers were asked to develop different activities for the specified attainments which included active methods. The most frequent of the activities developed by the teachers were activities based on "drama, case study, and empathy".

Key words: Life Sciences course, textbooks, activities.

1. Introduction

Life Sciences course, which children come across with during primary school age that is an important phase in their lives, is essential for it involves the elements including the first important rules of their lives. What is instructed in this course should be of quality in that it can adequately attract the attention of children in the concrete operational stage. Hence, activities of this course involving the elements that can activate children on a sufficient level will comply with today's educational system.

Qualified activities in curricula and therefore course books and their proper use by teachers will increase the quality of instruction and allow for an effective instruction of the course. There are several studies on the matter both in national and international literature (Ayva, 2010; Doğan, 2008; Dumains, 2006; Guzdial, Rick and Kehoe, 2001; Gürol, 2002; Karaca, 2008; Kerpiç and Bozkurt, 2011; Köroğlu and Yeşildere, 2004; Morris, 2001; Özmantar, Bozkurt, Demir, Bingölbali and Açıl, 2010; Skehan, 1999; Swan, 2007; Ubuz, Erbaş, Çetinkaya and Özgeldi, 2010; Uğurel and Bukova-Güzel, 2010; Yavuz, 2007; Yeo, 2007; Yiğittir and Kaymakçı, 2012).

In a study which investigated the effects of using art-combined activities in the classroom setting in the Social Studies course (Kosky, 2008), a classroom setting different from the classical classroom order was created in an effort based on the question "Why do students have to sit and listen to the teacher all the time?" Children who can perform various activities with their peers can also have fun. It was shown that student-teacher interaction increased quietly due to the activities of the study in question. Through

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such communication and interaction, students both feel more comfortable and become more open to learning.

Use of methods and activities that provides activeness in courses and activity-based learning has a vital place in education. Especially enabling students to be active is of importance pedagogically. Thus, activity-based learning should be featured by educators especially in the cognitive sense (Skehan, 1999). It is observed in the literature that drama, as one of the methods that provide activeness, has an important impact on students' knowledge and attitudes. In social sciences, indeed, it is the gospel truth how drama affects students (Edwars and Craig, 1990; Fischer, 1989; Haley, 1978; Kariath, 1967; Ridel, 1975 *in* Morris, 2001). Combination of active learning and evaluation in the classroom setting through drama paves the way for interesting environments in courses associated with social sciences. This brings major changes in students' attitudes toward these courses and their academic achievements in them.

It was also found that the same applies for other courses. For instance, Kerpiç and Bozkurt (2011) examined the activities in the seventh-grade Mathematics course book. They concluded that the activities should be redesigned based on the "activity design and practice principles." Accordingly, the researchers stated that activities in the seventh-grade Mathematics course book should be made of more quality for students. In the experimental study performed by Doğan (2008), a listening education model composed of activities was applied to elementary school seventh-grade students in Turkish course. It was concluded that performing the activities which includes active learning methods with the experimental group improved students' listening skills further than the classical educational-instructional activities in the control group. In another study, Köroğlu and Yeşildere (2004) used the experimental method in the instruction of integers in Mathematics course. While the course was instructed with multi-intelligence based activities in the experimental group, direct instruction method was used in the control group. Accordingly, the experimental group students had higher achievements than the control group in the unit of integers.

In a study which aimed to evaluate Life Sciences course books and student textbooks according to teacher opinions (Güven, 2010), Life Sciences course books and textbooks fell insufficient in terms of activities that facilitate learning. According to Güven's (2010) recommendation, certain methods and techniques need to be used to attract student's attention, and activities should be reinforced with visual elements.

It is understood from the previous studies that activities ensuring active participation in Life Sciences course was not addressed in the literature much even though it is observed for other courses. On the other hand, prominence of activeness in Life Sciences course in which children frequently encounter elements from their lives is greatly important. In accordance with such shortcomings, it was aimed to examined what are the activities to be performed in 2009 and 2015 Life Sciences curricula that involved the latest changes. Another purpose is that classroom teachers develop activities that will ensure activeness.

To this end, it was planned to examine what activities there are according to the latest changes made in Life Sciences curriculum in 2009 and 2016 in Turkey. The first use of 2015 Life Sciences Curriculum was when it was used in first graders in the academic year of 2016-2017. This study aimed to make a comparison between the activities in the Life Sciences textbook which started to be used in primary school first graders with the 2015 Life Sciences Curriculum and the activities in the first grade textbook that had been used according to the 2009 Life Sciences Curriculum according to Kabapınar's (2012) activity classification in the courses of Life Sciences and Social Sciences. Answers to the following research questions were accordingly sought for:

1) How do themes and units in the course books of 2009 and 2015 Life Sciences curricula differ?
2) How do number of activities in the course books of 2009 and 2015 Life Sciences curricula differ?
3) How do activities in the course books of 2009 and 2015 Life Sciences curricula differ by themes?
4) How do activities in the course books of 2015 and 2015 Life Sciences curricula differ by units?
5) How do activities developed by classroom teachers in accordance with the subjects in the course books of 2015 and 2015 Life Sciences curricula differ?

2. Methodology

The quantitative research method was used in the research. Course books based on the 2009 and 2015 curricula of Life Sciences were used as sources in the data collection stage. 5 classroom teachers who were teaching first graders at a state school on the Anatolian side of İstanbul province was chosen for the study group. These teachers were selected with convenience sampling, and participation was based on volunteering (Patton, 2014). The reason why the teachers were chosen for the study group following the examination of the course books was that it was aimed to find out what alternatives people in the center of the teaching area think about the activities in the books.

2.1. Data collection instruments

The document review was used as the data collection instrument in the study. First-grade Life Science course books of the 2009 and 2015 curricula and activities of the primary school first-grade classroom teachers were handled using the document review method. Distribution of the number of activities in the Life Sciences course books based on the 2009 and 2015 curricula by themes were examined according to Kabapınar's (2012) classification. The activities in the Life Sciences course books were examined, and it was determined what activities there were in the books. Next, the classroom teachers were asked to develop alternatives to these activities.

2.1. Data analysis

Content analysis, which is a qualitative research method, was used in data analysis (Yıldırım and Şimşek, 2013). Two experts of the field were consulted to ensure the reliability of the encoding in the content analysis. It was also ensured that they did encoding, and it was compared with the encoding done by the research. The results achieved using Miles and Huberman's (1994) reliability formulation are shown in Table 1.

Table 1. *Reliability coefficients of the data collection instrument*

Data Collection Instrument	Expert 1	Expert 2
Document Review (Course Books)	0.98	0.97
Document Review (Teacher Activities)	0.92	0.90

According to the data in Table 1, coefficients of 0.98 and 0.92 were obtained in the comparison of the data obtained by the researcher with the encoding done by expert 1. Coefficients of 0.97 and 0.90 were achieved in the comparison between the encoding done by the researcher and expert 1. It can be accordingly said that the analyses performed were reliable as an analysis is considered reliable when the coefficient in question is 0.70 or above according Miles and Huberman (1994).

3. Findings

3.1. Themes and units in the course books of 2009 and 2015 Life Sciences curricula

2009 and 2015 Life Sciences curricula were examined to identify what themes and units there were in the course books of these curricula in question. The data obtained are given in Table 2.

Table 2. *Themes or units in Life Sciences course books*

Life Sciences Curricula	Themes or Units
2009 Curriculum (Themes)	School is My Excitement
	My Unique Home
	Yesterday, Today, Tomorrow
2015 Curriculum (Units)	Me and My School
	My Family and My Home
	Healthy Life
	Safe Life
	I Love My Country
	Nature and Environment

According to Table 2, there were three themes in the 2009 Life Sciences curriculum. These included "School is My Excitement, My Unique Home, and Yesterday, Today, Tomorrow". Themes were replaced with units in the 2015 Life Sciences curriculum. These units included "Me and My School, My Family and My Home, Healthy Life, Safe Life, I Love My Country, and Nature and Environment". It was observed that three themes in the previous curriculum were replaced with six units in the new one.

3.2. Number of activities in the course books of 2009 and 2015 Life Sciences curricula

Number of attainments in the course books based on the 2009 and 2015 Life Sciences curricula and number of activities identified according to Kabapınar's (2012) classification are shown in Table 3.

Table 3. *Number of attainments and activities in Life Sciences course books*

Course Book	Number of Attainment (f)	Number of Activity (f)
2009 curriculum	292	438
2015 curriculum	143	296

Table 3 shows that there were 292 attainments in the Life Sciences course book of the 2009 curriculum, and this number decrease to 143 in the course book of the 2015 curriculum. Moreover, number of activities was 438 in the course book of the 2009 curriculum whereas it decreased to 296 in the course book of the 2015 curriculum in direct proportion with the attainments.

3.3. Distribution of the activities in the course books of 2009 Life Sciences curriculum by themes

How the number of activities in the Life Sciences course books based on the 2009 curriculum distributed by themes was examined according to Kabapınar's (2012) classification. The data obtained accordingly are given in Table 4.

Table 4. *Number of activities in the 2009 Life Sciences course book*

Themes	Number of Activity (f)
Theme 1- School is My Excitement	187
Theme 2- My Unique Home	148
Theme 3- Yesterday, Today, Tomorrow	103
Total	438

Table 4 shows that there were 438 activities in the Life Sciences course book based on the 2009 curriculum. 42.69% of them were the activities in Theme 1 which is "School is My Excitement", 33.78% of them were the activities in Theme 2 which is "My Unique Home", and 23.51% of them were the activities in Theme 3 which is "Yesterday, Today, Tomorrow". The activities are provided in detail in Table 5, 6 and 7.

Table 5. *Activities of the School is My Excitement theme in 2009 Life Sciences course book*

Theme 1- School is My Excitement	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	125
Interpreting photos and pictures	44
Empathizing	6
Discussing	5
Preparing projects and reports	4
Making comparisons	1
Telling similarities and differences	1
Mimicking sounds	1
Total	187

According to the activities in Table 5, 66.84% of activities in the "School is My Excitement" theme of the 2009 Life Sciences course book were the activities of "expressing one's thoughts, value judgments and assumptions". 23.52% of the activities were the activities of "interpreting photos and pictures." Table 6 shows the activities in the "My Unique Home" theme of the 2009 Life Sciences course book.

Table 6. *Activities of the my unique home theme in 2009 Life Sciences course book*

Theme 2- My Unique Home	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	103
Interpreting photos and pictures	28
Discussing	7
Giving examples	4
Empathizing	3
Making comparisons	1
Preparing projects and reports	1
Observing	1
Total	148

According to the activities in Table 6, there were 148 activities in total in the "My Unique Home" theme of the 2009 Life Sciences course book. 69.59% of them were the activities of "expressing one's thoughts, value judgments and assumptions" and 18.91% of them were the activities of "interpreting photos and pictures." Table 7 presents the activities in the "Yesterday, Today, Tomorrow" theme of the 2009 Life Sciences course book.

Table 7. *Activities of the yesterday, today, tomorrow theme in 2009 Life Sciences course book*

Theme 3- Yesterday, Today, Tomorrow	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	67
Interpreting photos and pictures	13
Preparing projects and reports	4
Making comparisons	3
Telling similarities and differences	3
Discussing	3
Empathizing	2
Mimicking sounds	2
Writing a resumé	1
Writing texts, short plays, cases	1
Giving examples	1
Observing	1
Examining tables, graphics and concept maps	1
Creating tables, graphics and concept maps	1
Total	103

According to the activities in Table 7, there were 103 activities in total in the "Yesterday, Today, Tomorrow" theme of the 2009 Life Sciences course book. 65.04% of them were the activities of "expressing one's thoughts, value judgments and assumptions" and 12.62% of them were the activities of "interpreting photos and pictures."

Given the activities in all themes of the 2009 Life Sciences course book (438 activities in total), the activities of "expressing one's thoughts, value judgments and assumptions" had the highest number (295 activities) which were followed by "interpreting photos and pictures" (85 activities) among all the themes.

3.4. Distribution of the activities in the course books of 2015 Life Sciences curriculum by units

Data on the distribution of the activities in the course books based on 2015 Life Sciences curricula by units are shown in Table 8.

Table 8. *Number of activities in the 2015 Life Sciences course book*

Units	**Number of Activity (f)**
Unit 1- Me and My School	87
Unit 2- My Family and My Home	44
Unit 3- Healthy Life	67
Unit 4- Safe Life	35
Unit 5- I Love My Country	29
Unit 6- Nature and Environment	34
Total	296

Table 8 shows that there were 6 units in the 2015 Life Sciences course book and there were 296 activities in them. 29.39% of them were the activities in Unit 1 "Me and My School", 14.86% of them were the activities in Unit 2 "My Family and My Home", 22.63% of them were the activities in Unit 3 "Healthy Life", 11.82% of them were the activities in Unit 4 "Safe Life", 9.79% of them were the activities in Unit 5 "I Love My Country" and 11.48% of them were the activities in Unit 6 "Nature and Environment". It was found that number of activities in the units are distributed within themselves proportionally.

As for the distribution of the activities by units, Table 9-14 presents the activities in each unit in detail.

Table 9. *Activities of the me and my school unit in 2015 Life Sciences course book*

Unit 1- Me and My School	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	44
Interpreting photos and pictures	28
Empathizing	6
Drawing posters, pictures and logos	3
Classifying, listing and matching	2
Painting the picture	2
Taking notes, summarizing, filling gaps and solving puzzles	1
Total	87

Considering the activities in the Unit 1 "Me and My School" of the 2015 Life Sciences course book shown in Table 9, there were 87 activities in total with 50.57% of them being "expressing one's thoughts, value judgments and assumptions" and 32.18% being "interpreting photos and pictures" activities.

Table 10. *Activities of the my family and my home unit in 2015 Life Sciences course book*

Unit 2- My Family and My Home	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	25
Interpreting photos and pictures	14
Drawing posters, pictures and logos	2
Noticing changes and continuity in photos and pictures	1
Taking notes, summarizing, filling gaps and solving puzzles	1
Empathizing	1
Total	44

Table 10 shows the activities in Unit 2 "My Family and My Home" of the 2015 Life Sciences course book. 56.81% of 44 activities in total were "expressing one's thoughts, value judgments and assumptions" and 31.81% of them were the activities of "interpreting photos and pictures."

Table 11. *Activities of the healthy life unit in 2015 Life Sciences course book*

Unit 3- Healthy Life	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	29
Interpreting photos and pictures	24
Classifying, listing and matching	7
Noticing changes and continuity in photos and pictures	3
Taking notes, summarizing, filling gaps and solving puzzles	2
Painting the picture	2
Total	67

As for the activities in the Unit 3 "Me and My School" of the 2015 Life Sciences course book shown in Table 11, 43.28% of 67 activities in total were "expressing one's thoughts, value judgments and assumptions" and 35.82% of them were "interpreting photos and pictures" activities.

Table 12. *Activities of the safe life unit in 2015 Life Sciences course book*

Unit 4- Safe Life	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	22
Interpreting photos and pictures	4
Classifying, listing and matching	3
Taking notes, summarizing, filling gaps and solving puzzles	3
Noticing changes and continuity in photos and pictures	2
Singing songs	1
Total	35

According to Table 12, there were 35 activities in Unit 4 Safe Life" of the 2015 Life Sciences course book in total, and 62.85% of them were the activities of "expressing one's thoughts, value judgments and assumptions".

Table 13. *Activities of the I love my country unit in 2015 Life Sciences course book*

Unit 5- I Love My Country	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	18
Drawing posters, pictures and logos	3
Classifying, listing and matching	2
Empathizing	2

Painting the picture	2
Taking notes, summarizing, filling gaps and solving puzzles	1
Interpreting photos and pictures	1
Total	29

As for the activities in the Unit 5 "I Love My Countries" of the 2015 Life Sciences course book shown in Table 13, 62.06% of 29 activities in total were "expressing one's thoughts, value judgments and assumptions".

Table 14. *Activities of the nature and environment unit in 2015 Life Sciences course book*

Unit 6- Nature and Environment	**Number (f)**
Expressing one's thoughts, value judgments and assumptions	20
Interpreting photos and pictures	4
Classifying, listing and matching	4
Empathizing	2
Drawing posters, pictures and logos	2
Taking notes, summarizing, filling gaps and solving puzzles	1
Noticing changes and continuity in photos and pictures	1
Total	34

Table 14 shows the activities in Unit 6 "Nature and Environment" of the 2015 Life Sciences course book. 58.82% of 34 activities in total were "expressing one's thoughts, value judgments and assumptions.

As an overview of the activities in the 2015 Life Sciences course book, 53.37% of 296 activities in total were "expressing one's thoughts, value judgments and assumptions" which were followed by 25.33% activities of "interpreting photos and pictures". As is seen, both the 2009 and 2015 Life Science curricula used the same type of activity in the highest number. It was observed that the activities aiming students' activeness more are in small numbers in both curricula.

3.5. Activities developed by classroom teachers in accordance with the subjects in the course books of 2015 Life Sciences curriculum

Both course books of the 2009 and 2015 Life Sciences curricula were examined according to Kabapınar's (2012) activity classification, and it was found that the most used activities were "expressing one's thoughts" and "interpreting photos and pictures". Thus, in compliance with the subjects of the 2015 Life Sciences course book, the classroom teachers were asked to develop different activities that enable students to be more active in the classroom. The teachers were allowed to choose the subjects on which they would develop an activity. Subjects chosen and activities developed by the teachers are shown in Table 15.

Table 15. *Activities developed by the classroom teachers*

Subjects	**Activities**	**Number of teachers (f)**
Who Would I Ask for Help? (Unit 1)	Case study	2
	Empathizing	2
	Drama	1
How Should I Use It? (Unit 2)	Making comparisons	2
	Empathizing	2
	Noticing changes and continuity in photos and pictures	1
For Our Health (Unit 3)	Drama	2
	Case study	1
	Drawing pictures	1

	Singing songs	1
Obey the Rules, Live Safely (Unit 4)	Empathizing	2
	Drama	2
	Making comparisons	1
Atatürk and National Holidays (Unit 5)	Having students play a drama	2
	Case study	2
	Drawing pictures	1
Four Seasons (Unit 6)	Empathizing	2
	Preparing posters	1
	Having students play a drama	1
	Case study	1

Table 15 shows that the teachers developed activities based on a subject selected from each unit. Accordingly, 2 teachers developed activities of "case study", 2 teachers "empathizing" and 1 teacher "drama" activities for the "Who Would I Ask for Help?" subject in Unit 1. Activity prepared by Teacher 5 about "case study" is presented below:

> *Aylin and Leyla wanted to go to school very much that day. Because the Teacher promised she would take them to a picnic. But both were lost on the way while going to the picnic with all their friends at school. Because Aylin showed Leyla a very colorful butterfly meanwhile, and they broke away from their friends. They were very scared and didn't know who they would ask for help. What if the person they would ask for help kidnapped them? What were Aylin and Leyla supposed to do?*
>
> • *After this case has been read to the children, they are asked to tell what happens next.*
>
> • *Questions "Did Aylin and Leyla do right or wrong to have broken away from their friends and teacher? Why? What would you do?" are asked to the children.*
>
> • *Then, they are asked to draw a picture about the case.*

As for the activities developed by the teachers about the subject "How Should I Use It?" in Unit 2, 2 teachers prepared activities of "comparing", 2 teachers prepared activities of "empathizing" and 1 teacher prepared activities "noticing changes and continuity in photos and pictures". The following is the example of the activity developed by Teacher 2 about "empathizing":

> *Berkcan uses the objects in his classroom very badly. He kicks the desks, draws pictures on walls and scatters the garbage in the litter box all around in the recesses. He once sprays the juice in his lunch box on the whiteboard and the teacher cannot use it during the course. His friends take this very hard. What should they do to make Berkcan get rid of these unpleasant habits?*
>
> • *After this case has been read to the children, pictures of the objects such as "broken and worn whiteboard, litter box, desk, bookcase" prepared beforehand are shown to them.*
> • *The students are asked to choose one of these objects and to put themselves in their place.*
> • *Then, they are asked to make the objects speak and express what they feel.*

About the subject "For Our Health" in Unit 3, 2 teachers created activities of "drama", 1 teacher created activity of "case study", 1 teacher developed activity of "drawing pictures", and 1 teacher created activity of "singing songs". Activity prepared by Teacher 4 about "drama" is presented below:

> *Students are asked to create groups of two with their friends next to them. It is told that one of them will impersonate a very healthy child who cares about what he/she eats and drinks and the other a child who eats junk food and do not care about hygiene. They are asked to work in groups of two.*
>
> • *The volunteers are summoned to the whiteboard, and impersonations are performed. Next, the roles (healthy-unhealthy child) are exchanged between students.*
>
> • *They are asked which child they prefer to be, and this is discussed with the class.*

Considering the activities developed by the subject "Obey the Rules, Live Safely" in Unit 4, 2 teachers prepared activities of "empathizing", 2 teachers prepared activities of "drama", and 1 teacher prepared activity of "comparing". The following is the example of the activity developed by Teacher 1 about "comparing":

> *Students are divided into groups of four.*
>
> - *Teacher makes them play a drama about the things experienced by children who do and do not obey traffic rules.*
> - *In the end, right and wrong situations are compared, and a conclusion is achieved.*
> - *After having the students make comparisons, they are asked to draw pictures of these situations.*

About the subject "Atatürk and National Holidays" in Unit 5, 2 teachers created activities of "drama", 2 teacher created activity of "case study", and 1 teacher developed activity of "drawing pictures". Activity prepared by Teacher 2 about "drawing pictures" is presented below:

> *Students are told that they will study individually. A case is read about Atatürk and National Holidays, and questions are asked and answered. Then, students are asked to draw a picture to tell an absent friend of them what they have learned that day. Therefore, students try to tell their absent friends what they have learned in the classroom while understanding what they have learned.*

Considering the activities developed by the subject "Four Seasons" in Unit 6, 2 teachers prepared activities of "empathizing", 1 teachers prepared activities of "preparing posters", 1 teacher prepared activity of "drama", and 1 teacher prepared activity of "case study". The following is the example of the activity developed by Teacher 3 about "preparing posters":

> *Students are told that they will study in groups of four. After the instruction of the subject "Four Seasons", they are told that they will prepare a poster. Colorful cardboards and paint are distributed to them. In this poster, features of each season will be described to tourists coming to our country in an effort. To this end, they are told to study with their friends and prepare the posters using several pictures and ornaments.*

Given the activities prepared by the teachers for all units, each of them is an activity to enable students to become more active in the classroom setting. In contrast with thinking-oriented activities mainly available in the books, the teachers gave more place to activities for children to have fun as they learn.

4. Conclusion, Discussion and Recommendation

This study aimed to identify the differences between the activities in the 2009 and 2015 Life Science course books. Another purpose was to examine the alternatives developed by the classroom teachers to these activities following the data obtained. The results show that the 2009 Life Sciences course book included the themes "School is My Excitement, My Unique Home, and Yesterday, Today, Tomorrow" whereas the 2015 Life Sciences course book included the units "Me and My School, My Family and Home, Healthy Life, Safe Life, I Love My Country, and Nature and Environment". It was observed that the number of attainments to be brought to students was 292 and the number of activities was 438 in the 2009 course book, and these numbers decreased to 143 and 296 in the 2015 course book, respectively.

The most available type of activity in all themes of the 2009 Life Sciences course book was found to be "expressing one's thoughts, value judgments and assumptions" while there were 125 activities in the first theme, 103 activities in the second theme and 67 activities of this kind in the third theme. The least used activities (one in each theme) were "making comparisons", "telling similarities and differences" and "mimicking sounds" in the first theme; "making comparisons", "preparing projects and reports" and "observing" in the second theme"; and "writing a resumé", "writing texts, short plays and cases" and "examining and creating tables, graphics and concept maps" in the third theme.

The most available type of activity in all units of the 2015 Life Sciences courses book was observed to be "expressing one's thoughts, value judgments and assumptions", and its number was 158 in all units. The least used types of activities were "taking notes, summarizing, filling gaps and and solving puzzles" in the first unit; "noticing changes and continuity in photos and pictures", "taking notes, summarizing, filling gaps and and solving puzzles" and "empathizing" in the second unit; "painting the picture" in the third unit; "singing songs" in the fourth unit; "taking notes, summarizing, filling gaps and and solving puzzles" and "interpreting photos and pictures"; and "noticing changes and continuity in photos and pictures" and "taking notes, summarizing, filling gaps and and solving puzzles".

After it had been determined that the most available activity in both books was "expressing one's thoughts, value judgments and assumptions", the classroom teachers were asked to develop activities about the subjects they chose from the first-grade Life Sciences course book. It was observed that the teachers developed different activities on the subjects "Who Would I Ask for Help?", "How Should I Use It?", "For Our Health", "Obey the Rules, Live Safely", "Atatürk and National Holidays", and "Four Seasons". Most of the 30 activities developed by the teachers was "having students play a drama" (8), "empathizing" (8), and "case study" (6).

In the light of the results achieved, it was determined that activities in the Life Sciences course books were for students to "express their thoughts, value judgments and assumptions" and to "interpret photos". However, as seen in the several studies in the literature (Ayva, 2010; Doğan, 2008; Dumains, 2006; Guzdial, Rick and Kehoe, 2001; Gürol, 2002; Karaca, 2008; Kerpiç and Bozkurt, 2011; Kosky, 2008; Köroğlu and Yeşildere, 2004; Morris, 2001; Skehan, 1999; Swan, 2007; Ubuz, Erbaş, Çetinkaya and Özgeldi, 2010; Uğurel and Bukova-Güzel, 2010; Yavuz, 2007; Yeo, 2007; Yiğittir and Kaymakçı, 2012) it is rather recommended to use activities which make students more active in the classroom setting, enable them to express themselves more comfortably and to learn by having fun.

The above mentioned studies show that students have higher achievements in several fields in the classrooms using the active learning methods while they have a positive attitude toward the courses and the activities. Sönmez (1992) observed the courses instructed by 187 teachers in primary schools. It was found that the teachers generally used question-answer, formal teacher speech and discussion methods. On the other hand, none of them utilized active learning methods such as case study, brainstorming, show-have it done method, experiment, trip-observation, debate, problem solving, etc. and educational games. Sönmez (1992) stated that it is important to render students more active especially during the primary school years and instruct the course that way in the classroom setting.

In another study, opinions of 43 students attending the primary school fourth grade on learning-teaching process in Social Studies course were received (Ayva, 2010). The students stated that the active learning methods were positive and also found the courses instructed in the same way positive. It was concluded that visual activities that increase activeness drew more attention. The students stated that trips organized to enable activeness, worksheets, fun activities increased their interest and achievement in the course.

Dumains (2006) determined that activities had a positive impact on students' academic achievements in Mathematics course. These activities included dancing, musical activities, physical activities, art class activities. It was found that such activities developed by teachers especially in younger age groups enabled students' bodies and therefore their minds. Also, Guzdial, Rick and Kehoe (2001) mentioned the importance of web-aided cooperative learning tools in education. They explored that students who could perform various activities in cooperation with their peers in the classroom setting would affect their achievement positively.

The final conclusion achieved in this research is that both curricula generally have the same types of activities although the number of activities were decreased in the latest curriculum. It can be said that the decreased number of attainments and activities in the 2015 curriculum is better in that it does not subject students to information overload. Yet, it would be better to diversify the activities and increase the number of activities in the course books that may enable students to be more active in the classroom settings. Hence, it is of importance that classroom teachers can develop such activities in addition to course books.

Indeed, in the study performed by Aykaç (2007), the teachers reported that they had problems with implementing the activities in the elementary school curriculum which entered into effect in 2005-2006

academic year, there was lack of knowledge about methods and class sizes were not suitable for the implementation of those activities. Furthermore, the teachers provided negative opinions on the 1998 Life Sciences curriculum in Özçetin's (2000) study. The teachers found the curriculum insufficient in terms of content, description of objectives, and assessment-evaluation.

Consequently, it was observed that activities that can make students become active in the classroom setting and using such methods and techniques is of importance for courses especially in social sciences. It can be therefore recommended to increase the number of such studies to be conducted with classroom teachers and students and to conduct qualitative studies, particularly. How active learning methods affect achievement and attitude is generally investigated in quantitative studies generally in the literature. Yet, action research is especially required for reflecting the classroom climate in a straightforward way and identifying student and teacher reactions during the process.

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