



# A COMPARATIVE EXAMINATION OF SCIENCE ACHIEVEMENTS IN LIFE STUDIES COURSE CURRICULA OF 2009, 2015 AND 2018 ACCORDING TO THE REVISED BLOOM'S TAXONOMY: THE CASE OF TURKEY

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**Abstract:** The purpose of this study is to determine the distribution of Science achievements in Life Studies Course Curricula of 2009, 2015 and 2018 regarding the knowledge and cognitive process dimensions of the Revised Bloom Taxonomy and to comparatively examine the resulting distributions. This study adopted document analysis. While conducting the analysis, we classified the achievements as factual knowledge, conceptual knowledge, operational knowledge and meta-cognitive knowledge in the accumulation of knowledge dimension and as remembering, understanding, applying, solving, evaluating and creating in the cognitive process dimension. Based on our findings, we concluded that achievements of 2009, 2015 and 2018 curricula focused on remembering, understanding and applying levels in the cognitive dimension and factual and conceptual knowledge dimensions in the knowledge dimension. We present some recommendations for teachers and teacher candidates, which they can use while preparing their lesson plans.

**Key words:** Revised Bloom's Taxonomy, Life Studies Course Curriculum, Life Sciences, Achievements

## 1. Introduction

One of the significant goals of developed and developing countries is to maintain a sustainable development in order not to fall behind in science and the use of science in technology as well as to catch up with the developments in these areas. There is no doubt that the most important criteria to establish sustainable development is raising individuals as qualified people. In this regard, it is obvious that in the present time, countries often resort to updating their curricula (Ayas, Çepni & Akdeniz, 1993; Ünal, Çoştu & Karataş, 2004; Kurnaz & Çepni, 2012). It is possible to say that curriculum revision efforts are crucial for sustainable development.

All countries conduct teaching practices according to their current curricula. In other words, curricula form the basis of education and learning activities. A curriculum can be defined as all the activities including teaching and learning activities both inside and outside of an educational institution (Büyükalın-Filiz, 2011). These activities contribute to the improvement of the goals for institutions as well as for the national education provided to children, youngsters and adults receiving education at educational institutions (Küçükahmet, 2014). Additionally, the processes and contents that change individuals' values, attitudes and manners; improve their skills; make them knowledgeable and understanding and, in this context, contribute to learning experiences of individuals in a target group to be educated under a plan are all carried out in accordance with a curriculum (Doll, 1986; Saylor, Alexander & Lewis, 1981). Each curriculum represents what kind of an approach will be selected for

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educating the students (Posner, 2003). All curricula have certain elements (Taba, 1962), and these elements (goals, content, education-teaching processes and assessment/evaluation) are in association and harmony with each other in the curricula. Goals are crucial for creating a foundation for others (Bümen, 2006).

Goals in the process of curriculum development are reflections of the problem of why we train individuals (Ekiz, 2008; Çepni & Çil, 2012; Kurnaz & Çepni, 2012). Educational goals are deemed necessary for directing the teaching process, determining the actions to be taken in this process and guiding the assessment efforts during or after the process. Characteristics such as knowledge, skills, attitudes and habits are desired to be passed onto students and selected accordingly (Demirel, 2007). At the same time, goals also present criteria for the characteristics (Demirel & Kaya, 2011). In this context, a need to organise important goals and make them clear and easy to understand for the teachers led to a need for a classification (taxonomy) of the goals (Özçelik, 2014). Scholars have been working on the cognitive, affective and psycho-motor domains since the 1950s (O'Neill & Murphy, 2010). It is possible to examine the classification pursuits in the cognitive field in three periods based on the studies of O'Neill and Murphy (2010):

The 1950s ____	The 1980s ____	The 2000s
Bloom's Taxonomy (Bloom, 1956)	SOLO Taxonomy (Bigg & Collis, 1982)	Revised Bloom's Taxonomy (Anderson et al., 2001)

This study focused on the Bloom's Taxonomy, which is one of the above-mentioned classification systems widely used in the national literature and was revised in 2001. The Revised Bloom's Taxonomy (RBT) consists of the accumulation of knowledge and cognitive process dimensions. At the accumulation of knowledge dimension, there are factual, conceptual, operational and meta-cognitive knowledge sub-dimensions; at the cognitive process dimension, there are remembering, understanding, applying, solving, evaluating and creating sub-dimensions. These sub-dimensions are listed from the simplest to the most complicated (Özçelik, 2014).

The relevant literature reveals that there are some studies which examined the achievements of some curricula using the RBT at various levels (Kablan, Baran & Hazer, 2013; Eroğlu & Kuzu, 2014; Özdemir, Altıok & Baki, 2015; Yaz, 2015). The results of these studies show that there are more achievements that are generally directed towards the lower-levels; the number of achievements decrease or even end towards the upper levels; in the light of these results, we presented some recommendations about taking necessary precautions. Therefore, it is possible to argue that studies examining the efficiency and evolution of curricula are important and should continue. In this regard, it is also possible to say that more studies examining Life Studies Course Curriculum—one of the newly updated curriculum—from different angles are needed.

Some of the important goals of elementary education are to teach knowledge and skills to students cognitively, assist them acquire knowledge and skills that would help them deal with their current status or possible statuses in the future and raise them to be responsible for themselves and the society as well as to be good citizens. Classes are used to reach these goals and Life Studies class is one of those classes that contribute to the realisation of these goals (Fidan & Baykul, 1994; Gültekin & Kılıç, 2014). Simplified/basic versions/contents of the health, security, biology, physics and chemistry topics, which are covered by this class, are part of Science Course Curriculum (Kabapınar, 2012). There is an increasing focus on raising qualified individuals in Turkey, under the influence of the recent technological and economic developments; therefore, the efforts to revise/improve curricula are more common. This study deems it important to examine Science achievements in Life Studies course, which forms the foundation of more advanced levels. We looked at the changes in Science achievements of the current and former Life Studies Course Curricula considering the RBT. The results will not only be indicative of the changes in Turkey, but they will also be helpful in guiding other countries with similar characteristics.

## 2. The Purpose of the Study

The purpose of this study is to determine the distribution of Science achievements in Life Studies Course Curricula of 2009, 2015 and 2018 with regard to the knowledge and cognitive process dimensions of the RBT and comparatively examine the resulting distributions. In this context, we determined the following research questions:

1. How is the distribution of Science achievements in 2009 Life Studies Course Curriculum considering the RBT?
2. How is the distribution of Science achievements in 2015 Life Studies Course Curriculum considering the RBT?
3. How is the distribution of Science achievements in 2018 Life Studies Course Curriculum considering the RBT?

## 3. Methodology

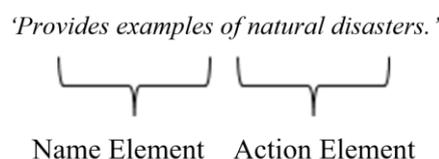
This study adopted the document analysis method. In this study, we examined Science achievements in Life Studies Course Curricula of 2009, 2015 and 2018, which were taught to Grades 1–3.

### Data Analysis

In this study, first, we determined Science achievements in the curricula. These achievements were determined by being associated with topics and achievements in the Science Course Curriculum and the researchers reached a consensus on them. The achievements examined in this study were analysed using the RBT developed by Anderson et al. (2001). This taxonomy has two dimensions: the cognitive process and knowledge dimensions. These two dimensions were designed using the comparative structure shown in Table 1. This table was used to analyse the curricula (Yaz & Kurnaz, 2017; Gezer et al., 2014; Eroğlu & Kuzu, 2014; Tahaoğlu, 2014; Kablan, Baran & Hazer, 2013; Gazel & Erol, 2012; McBain, 2011, Başar, 2009; Liang & Yuan, 2008; Van Rooy, 2006) or exam questions in various studies (Radmehr & Drake, 2018; Wylie, Dutilly & Nielsen, 2018; Gökulu, 2015; Karaman et al., 2014; Gökler, Aypay & Arı, 2012; Tolan, 2011; Ayvaci & Türkdoğan, 2010; Gündüz, 2009 Aviles, 2000) (see Annex 1).

### Sample Analysis

Considering the achievement of 'Provides examples of natural disasters', which was included in 2018 curriculum and was one of the curricula examined in the present study, we determined the name and action elements as shown in Figure 1. The name element indicates the accumulation of knowledge dimension, and the action element indicates the cognitive process dimension.



**Figure 1.** *The Achievement*

The element of 'natural disasters' (flood, landslide, avalanche, storm, tornado and earthquake) was evaluated as to indicate the factual knowledge which is a sub-dimension of specific detail and elements knowledge, and 'provides examples' element was evaluated as to indicate exemplifying sub-dimension of the cognitive process dimension.

Two researchers individually coded the data while classifying the achievements included in this study. Next, the researchers came together and discussed the coding that they had done individually and reached a consensus on the codes. The reliability of the study is calculated by the formula proposed by Miles and Huberman (1994) for qualitative research. The Miles and Huberman reliability coefficient of the study was found .85.

## 4. Results

This section provides the distribution of Science achievements in Life Studies Course Curricula of 2009, 2015 and 2018 at the cognitive process and accumulation of knowledge dimensions and sub-dimensions of the RBT in tables and graphs. The reliability of the study is calculated by the formula proposed by Miles and Huberman (1994) for qualitative research. The Miles and Huberman reliability coefficient of the study was found .85.

### Results regarding the 2009 curriculum

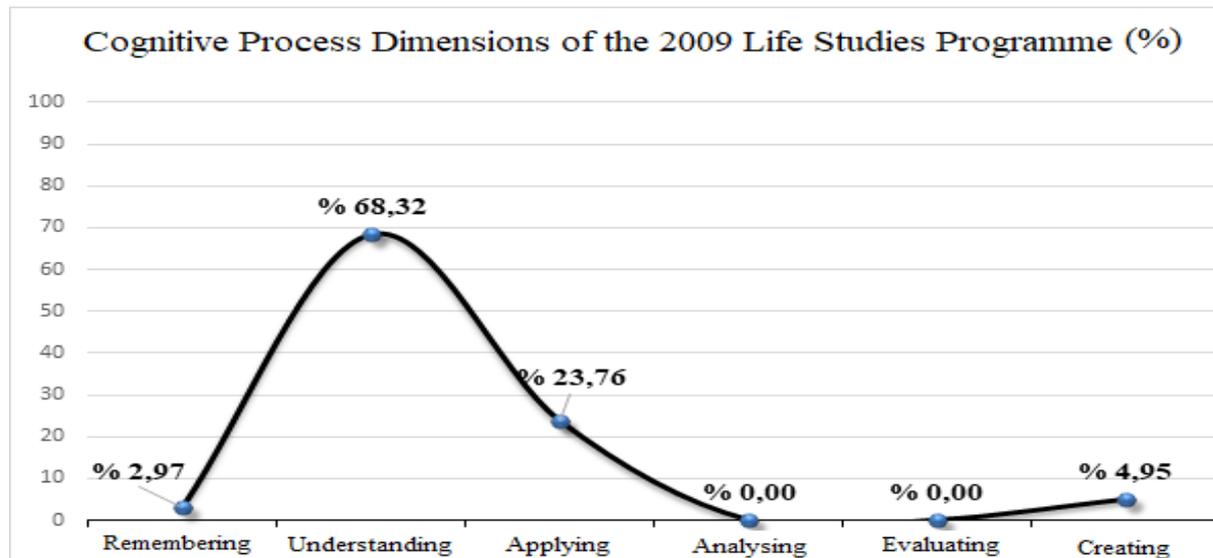
The distribution of Science achievements in the 2009 Life Studies Course Curriculum taught at Grades 1–3 at the cognitive process and accumulation of knowledge dimensions is presented in the following table.

**Table 1.** The Number of Achievements in 2009 Life Studies Course Curriculum According to the Dimensions of the RBT

Cognitive Process Dimension		Accumulation of Knowledge Dimension							Total		
		Factual Knowledge		Conceptual Knowledge			Operational Knowledge				Meta-cognitive Knowledge
		TK	SDKKF	CCK	PGK	TMSK	TSAAK	TSTMK	SK		
Remembering	Recognising			3						3	3
Understanding	Interpreting		3	25	2					30	69
	Exemplifying			1						1	
	Classifying		1	5		1				7	
	Concluding	1	2	8	1	1				13	
	Comparing			8	2					10	
	Explaining		1	3	3				1	8	
Applying	Making		3	16	1	1	2			23	24
	Benefiting							1		1	
Creating	Forming			1					1	2	5
	Planning								3	3	
Total		1	10	70	9	3	2	1	5	101	
		11		82			3		5		

According to Table 1, 2009 curriculum had 71 Science achievements. However, there was more than one expression indicating action/occurrence/deed in some of the achievements, and they were all evaluated separately. Further, we determined that there were 30 more achievements. Accordingly, the number of achievements was increased from 71 to 101. The analyses were conducted according to these 101 achievements. We discovered that the greatest number of achievements in the accumulation of knowledge dimension were in the conceptual knowledge (f=82) dimension. When we examined the achievements in the other dimensions, we saw that there were 11 achievements in the factual knowledge dimension, 3 in the operational knowledge dimension and 8 in the meta-cognitive

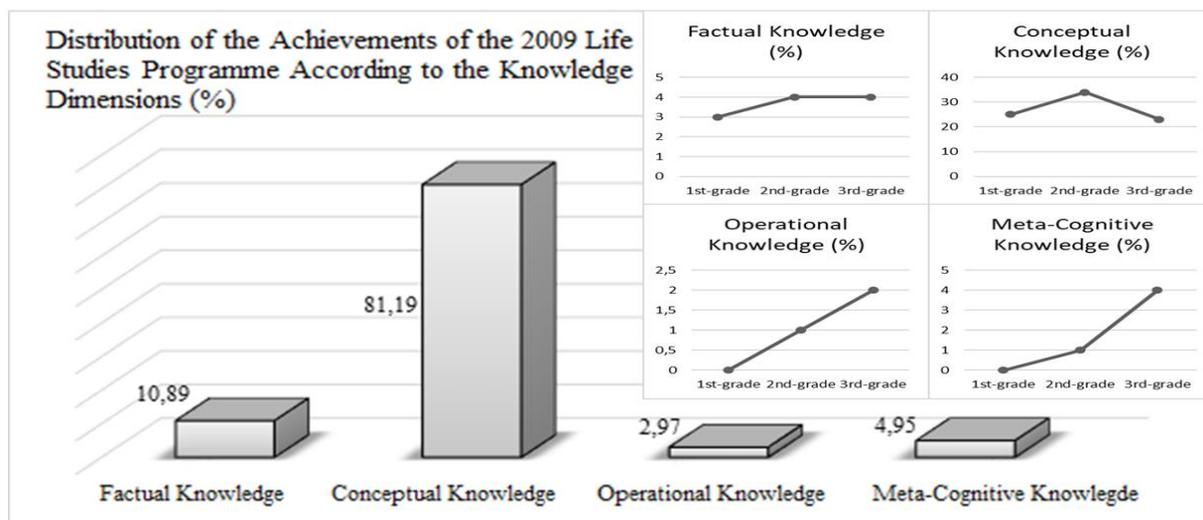
knowledge dimension. When we checked achievements in the cognitive process, we saw that the achievements concentrated on the understanding (f=69) dimension. This was followed by achievements in applying (f=24), creating (f=5) and remembering (f=3) dimensions. In the operational knowledge dimension of the accumulation of knowledge dimension, there was information about when and how to use appropriate methods and about cognitive duties consisting of appropriate contexts and conditions at the meta-cognitive knowledge dimension: knowledge on the self. At the cognitive process dimension, there were recalling in the remembering dimension and summarising and analysing in the understanding dimension; there were no achievements in the evaluating dimension. Graph 1 shows the overall and class-based distribution of these achievements in percentages in the cognitive process dimensions.



**Graph 1.** Percentage Distribution of the Achievements of 2009 Life Studies Course Curriculum in Cognitive Process Dimensions

Graph 1 shows that the overall distribution of Life Studies achievements in 2009 curriculum at the cognitive process dimension concentrated on the understanding dimension. There were no achievements in the analysing and evaluating dimensions. When we examined the dimensions of the achievements according to the class level, we determined that at the understanding level, as the grade level increased, the number of achievements decreased; however, achievements increased at the applying and creating dimensions. At the remembering dimension, which is the lowest level of the cognitive process dimension according to the RBT, the ratio of achievements decreased at the 2nd grade; however, they increased again at the 3rd-grade level.

Graph 2 shows the overall and class-based distribution of the achievements in the accumulation of knowledge dimension.



**Graph 2.** Percentage Distribution of the Achievements of 2009 Life Studies Course Curriculum at the Accumulation of Knowledge Dimensions

According to Graph 2, there were achievements in each dimension of the accumulation of knowledge dimension according to the RBT. It was seen that these achievements generally concentrated on the conceptual knowledge dimension. When we examined the class-based distribution of achievements in the accumulation of knowledge dimension, we discovered that the ratio of achievements in the conceptual knowledge dimension decreased as the grade level increased, whereas the ratio of achievements increased as the grade level increased in the operational knowledge and meta-cognitive knowledge dimensions. The ratio of the achievements in the factual knowledge dimension decreased at the 2nd-grade level and increased at the 3rd-grade level.

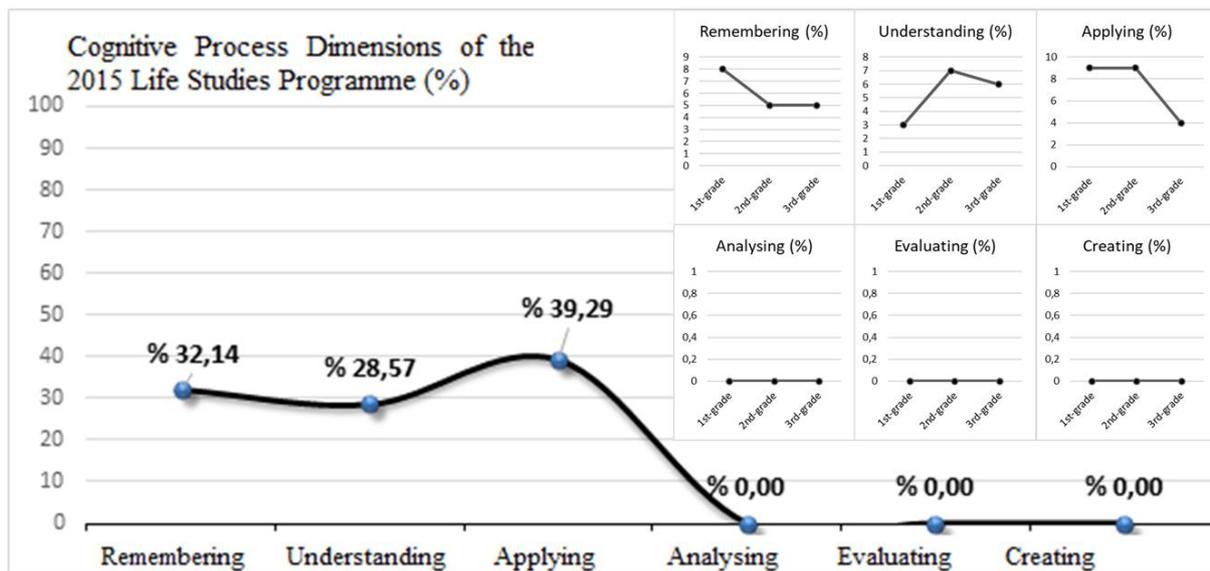
### Results regarding the 2015 curriculum

Table 2 presents the number of Science achievements in the 2015 Life Studies Course Curriculum classified at the accumulation of knowledge and cognitive process dimensions and their sub-dimensions of the RBT.

**Table 2.** The Number of Achievements in 2015 Life Studies Course Curriculum According to the Dimensions of the RBT

Cognitive Process Dimension		Accumulation of Knowledge Dimension						Total	
		Factual Knowledge		Conceptual Knowledge		Operational Knowledge			
		TK	SDKKF	CCK	PGK	TMSK	TSTMK		
Remembering	Recognising	1		2				3	3
Understanding	Interpreting			4	3			7	24
	Exemplifying	1		1	4			6	
	Classifying		1	2				3	
	Concluding			1	3			4	
	Comparing			2				2	
Applying	Explaining			1	1			2	19
	Making	1	2	12	2	1	1	19	
Creating	Forming				2			2	2
Total		3	3	25	15	1	1	48	
		6		41		1			

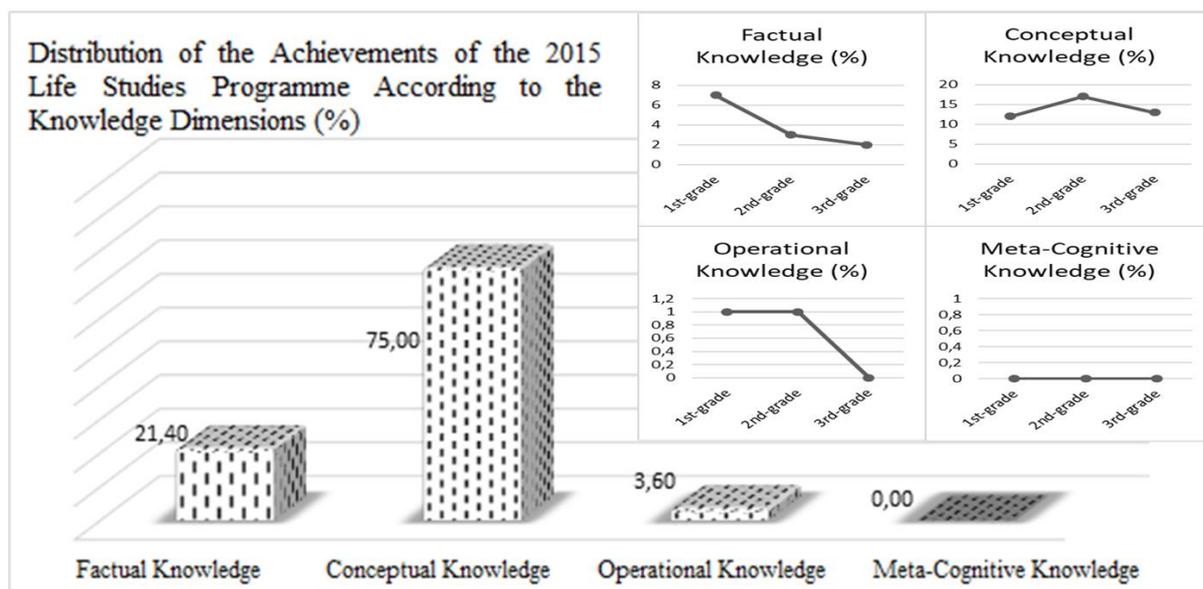
According to Table 2, there were 54 Science achievements in 2015 Life Studies Course Curriculum for Grades 1–3. However, there were more than one expressions indicating action/occurrence/deed in some of the achievement sentences and they were all evaluated separately. Further, we determined that there were 2 more achievements. Accordingly, the number of achievements was increased from 54 to 56. The analyses were conducted according to these 56 achievements. There were 42 achievements in the conceptual knowledge dimension, 12 in the factual knowledge dimension and 2 in the operational knowledge dimension. No Science achievements were classified at the meta-cognitive knowledge dimension. When we examined the distribution of achievements in the cognitive process dimension, we saw the highest number of achievements were at the applying (f=22) dimension, followed by remembering (f=18) and understanding (f=16) dimensions. There were no achievements in the knowledge dimension of factual knowledge dimension; theory, model and structure knowledge dimensions of the conceptual knowledge dimension; knowledge of criteria on when and how to use appropriate methods in the operational and meta-cognitive knowledge dimensions; remembering and recalling dimensions of cognitive process dimension; summarising and comparing dimensions of the understanding dimension and benefiting, analysing, evaluating and creating dimensions of the applying dimension. Graph 3 shows the overall and class-based distribution of these achievements in percentages at the cognitive process dimensions.



**Graph 3.** Percentage Distribution of the Achievements of the 2015 Life Studies Course Curriculum in Cognitive Process Dimensions

Graph 3 shows that the overall distribution of Life Studies achievements in the 2015 curriculum concentrated on the applying dimension of the cognitive process dimension. These achievements were followed by those at the remembering and understanding dimensions. There were no achievements in creating and evaluating dimensions. When we examined the dimensions of the achievements according to the class level, we determined that at the understanding level, as the grade level increased, the number of achievements decreased. Like the 2009 curriculum, ratio of the achievements classified at the remembering dimension of the 2015 curriculum decreased at the 2nd grade; however, they increased at the 3rd grade.

Graph 4 shows the overall and class-based distribution of the achievements in the accumulation of knowledge dimension.



**Graph 4.** Percentage Distribution of the Achievements of 2015 Life Studies Course Curriculum at the Accumulation of Knowledge Dimensions

According to Graph 4, there were achievements in the meta-cognitive knowledge dimension of the accumulation of knowledge dimension according to the RBT. When we examined the other dimensions, we saw that the achievements concentrated on the conceptual knowledge dimension, followed by the factual knowledge and operational knowledge dimensions, respectively. When we looked at the distribution of the achievements at the accumulation of knowledge dimension according to the class level, we discovered that as the grade level increased, achievements in the factual knowledge and operational knowledge dimensions also increased, and ratio of the achievements in the conceptual knowledge dimension increased.

### Results regarding the 2018 curriculum

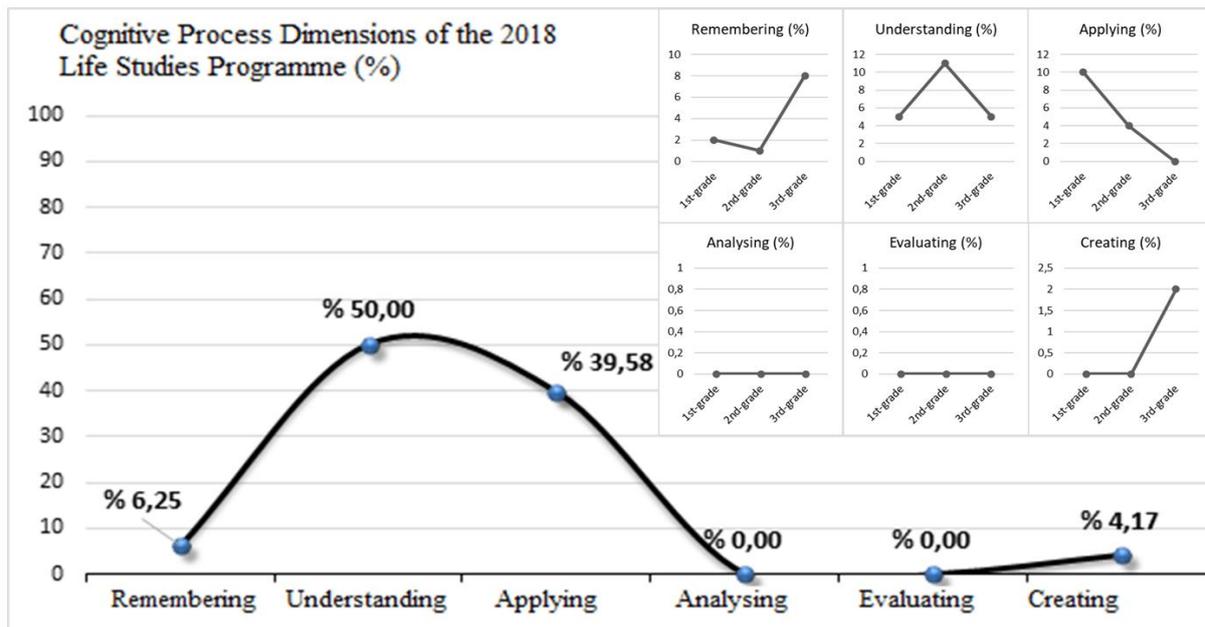
Table 3 shows the number of Science achievements in the 2018 Life Studies Course Curriculum taught in Grades 1–3 and classified at the accumulation of knowledge and cognitive process dimensions and their sub-dimensions according to the RBT.

According to Table 3, the 2018 Curriculum had 46 Science achievements. However, there were more than one expressions indicating action/occurrence/deed in some of the achievement sentences, and they were all evaluated separately. Further, we determined that there were 2 more achievements. Accordingly, the number of achievements was increased from 46 to 48. The analyses were conducted according to these 48 achievements. There were 41 achievements in the conceptual knowledge dimension, 6 in the factual knowledge dimension and 1 in the operational knowledge dimension.

When we examined the distribution of achievements in the cognitive process dimension, we saw that 24 achievements were at the understanding dimension, 19 at the applying dimension, 3 at the remembering dimension and 2 at the creating dimension. There were no achievements in the topic-specific ability, algorithm knowledge dimension and algorithm dimension of the operational knowledge dimension; criteria knowledge on when and how to use appropriate methods in the operational and meta-cognitive knowledge dimensions; remembering and recalling dimensions of cognitive process dimension; summarising dimension of the understanding dimension; benefiting, analysing, evaluating, planning and creating dimensions of the applying dimension. Graph 5 shows the overall and class-based distribution of these achievements in percentages at the cognitive process dimensions.

**Table 3.** The Number of Achievements in the 2018 Life Studies Course Curriculum According to the Dimensions of the RBT

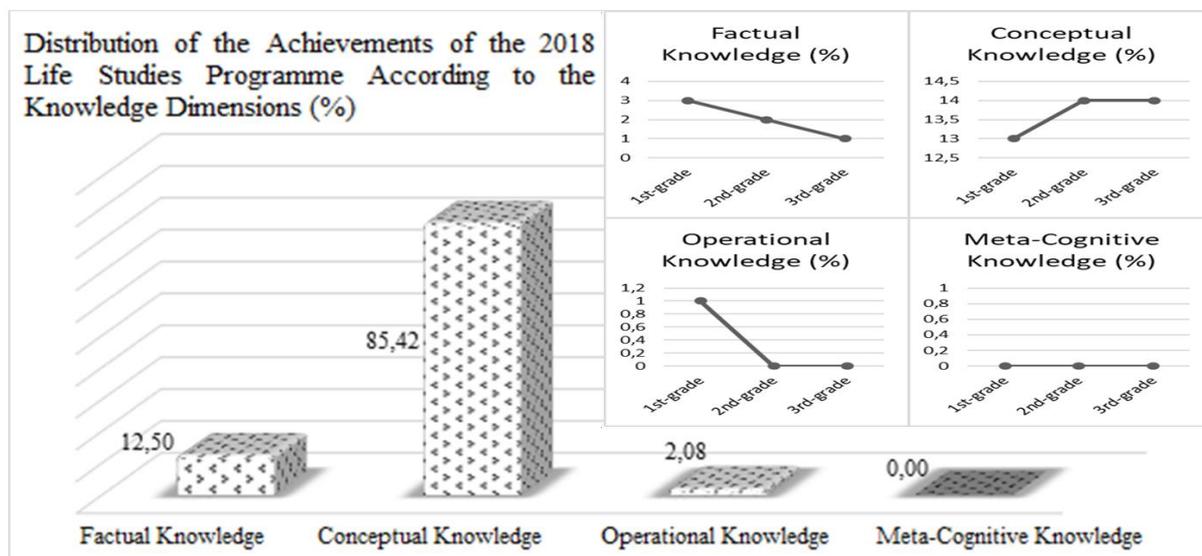
Cognitive Process Dimension		Accumulation of Knowledge Dimension						Total	
		Factual Knowledge		Conceptual Knowledge		Operational Knowledge			
		TK	SDKKF	CCK	PGK	TMSK	TSTMK		
Remembering	Recognising	1		2				3	3
Understanding	Interpreting			4	3			7	24
	Exemplifying	1		1	4			6	
	Classifying		1	2				3	
	Concluding			1	3			4	
	Comparing			2				2	
Applying	Explaining			1	1			2	19
	Making	1	2	12	2	1	1	19	
Creating	Forming				2			2	2
Total		3	3	25	15	1	1	48	
		6		41		1			



**Graph 5.** Percentage Distribution of the Achievements of the 2018 Life Studies Course Curriculum at Cognitive Process Dimensions

When we examined Graph 5, we saw that the Science achievements of the 2018 Elementary School Life Studies Course Curriculum concentrated on the understanding dimension of the cognitive process dimension. This was followed by achievements in the applying dimension. There were also achievements in the remembering and creating dimensions, though less in number than those in the other dimensions. There were no achievements in the analysing and evaluating dimensions. When we examined the dimensions with achievements according to the class level, we found that achievements in the remembering dimension decreased at the 2nd-grade level and increased at the 3rd grade.

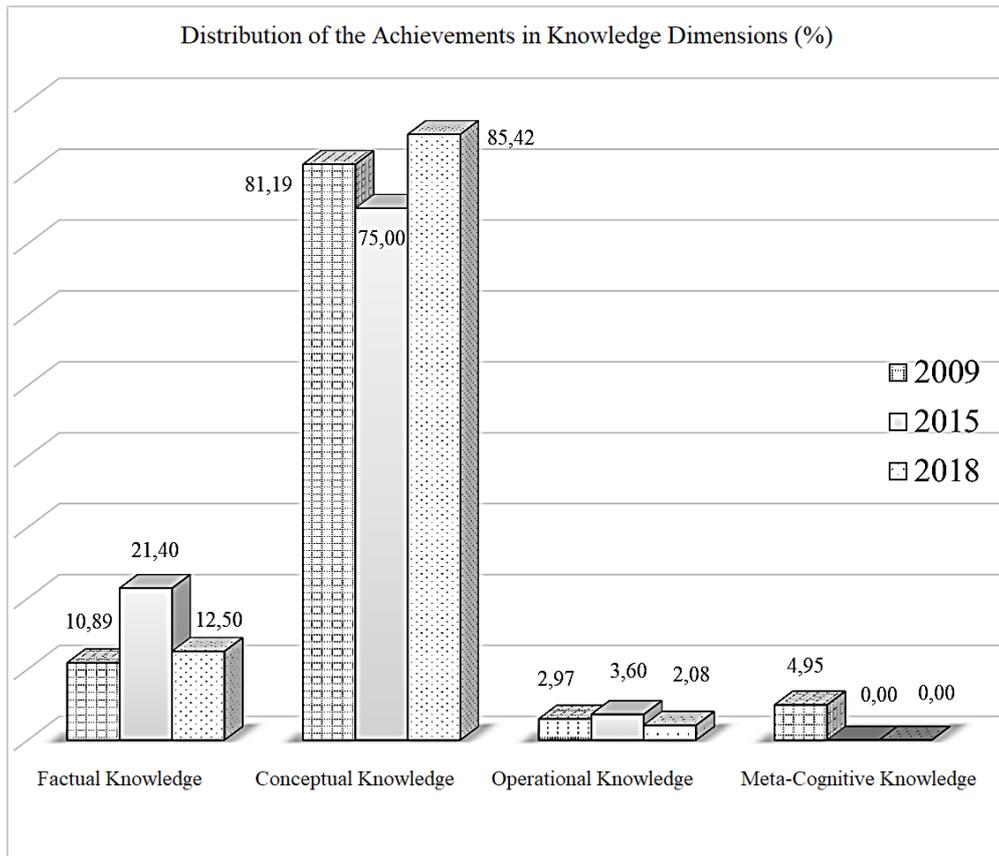
Achievements in the understanding dimension increased at the 2nd-grade level and decreased at the 3rd grade. Ratio of the achievements in the applying dimension decreased as the grade level increased. Moreover, there were no achievements in this dimension at the 3rd grade, and there were achievements in the creating dimension only at the 3rd grade. Graph 6 shows the overall and class-based distribution of the achievements in the accumulation of knowledge dimension.



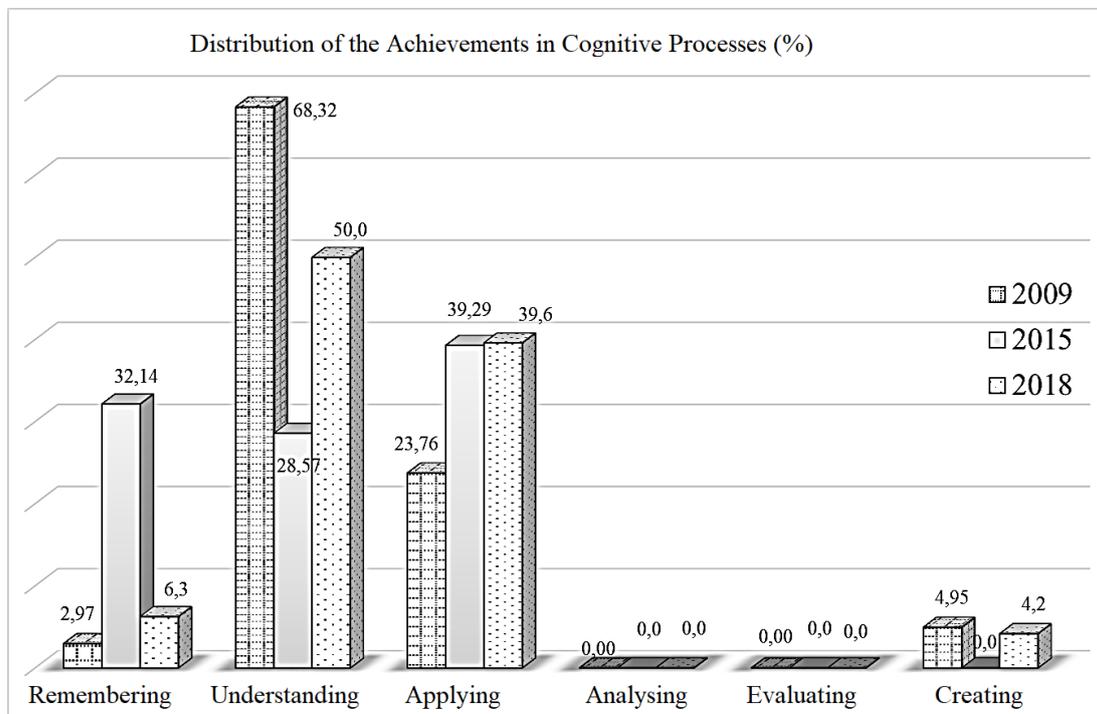
**Graph 6.** Percentage Distribution of the Achievements of the 2018 Life Studies Course Curriculum at the Accumulation of Knowledge Dimensions

According to Graph 6, there were achievements in the meta-cognitive knowledge dimension of the accumulation of knowledge dimension. When we examined the other dimensions, we saw that the achievements were concentrated on the conceptual knowledge dimension, followed by the factual knowledge and operational knowledge dimensions, respectively. When we looked at the distribution of achievements according to the class level at the accumulation of knowledge dimension, we discovered that as the grade level increased, the achievements in the factual knowledge and operational knowledge dimensions decreased, but ratio of the achievements in the conceptual knowledge dimension increased.

Graph 7 shows the comparative distribution of achievements of the 2009, 2015 and 2018 curricula at the accumulation of knowledge dimensions.



**Graph 7.** Percentage Distribution of the Achievements of 2009, 2015 and 2018 Life Studies Course Curricula at the Accumulation of Knowledge Dimensions



**Graph 8.** Percentage Distribution of the Achievements of the 2009, 2015 and 2018 Life Studies Course Curricula in the Cognitive Process Dimensions

When we examined Graph 7, we saw that the achievements of all the three curricula were classified under the conceptual knowledge dimension. Although there were a small number of achievements in the operational and meta-cognitive knowledge dimensions, there were no achievements in the meta-cognitive knowledge dimension in the 2015 and 2018 curricula.

Graph 8 shows no achievements in the analysing and evaluating dimensions for all the three curricula. Achievements of the 2009 and 2018 curricula were concentrated on the understanding dimension. This was valid for the remembering dimension of the 2015 curriculum. Furthermore, there were no achievements in the creating dimension of the 2015 curriculum.

## 5. Conclusion

This study was conducted to examine Science achievements in Life Studies Course Curricula of 2009, 2015 and 2018 considering their knowledge and cognitive process dimensions as per the RBT and to comparatively examine resulting distributions. In sum, achievements of the 2009, 2015 and 2018 curricula focused on remembering, understanding and applying levels at the cognitive dimension and factual and conceptual knowledge dimensions of the knowledge dimension. When we analysed this from the perspectives of cognitive knowledge and accumulation of knowledge dimensions, we found that the achievements did not have a homogeneous distribution and were related to the sub-dimensions. Moreover, ratio of the achievements in the analysing, evaluating, creating or meta-cognitive knowledge dimensions was not high enough. Thus, it can be argued that Science achievements of the curricula are not sufficient for developing skills at the application and, especially, synthesis levels. It is stated in the curriculum of the Ministry of National Education (2009) that focusing on the achievements would help students develop the skills mentioned in the curriculum, such as critical thinking, creative thinking and entrepreneurship. In this study, we examined the curricula in the given years and discovered no achievements that would help students develop upper-level skills as we have explained above. In other words, it can be argued that Science achievements are not sufficient to cover the knowledge and skill dimensions of the RBT.

When we compared class levels in the cognitive process dimension, we found no achievements that met every dimension of every grade level; although achievements at some dimensions increased at some grade levels according to years, some of them decreased (for example, achievements at the applying dimension). It is stated in the 2009 curriculum that the achievements had a spiral structure and every achievement was supposed to be a precursor for the following achievements while creating the achievements (Tay & Baş, 2015). In this regard, this study concludes that although the achievements were expected to become more diverse as the grade level increased, in reality, there was a decrease in the number of achievements in some dimensions (see Graph 7). This can be explained with the number of achievements included in the curricula in different years and the diversification of their content despite the spiral structure.

When we examined achievements in the accumulation of knowledge dimension, we saw that achievements in the conceptual knowledge dimension decreased as the grade level increased, according to the 2009 curriculum. On the contrary, achievements in the factual knowledge and operational knowledge dimensions decreased as the grade level increased, whereas those in the conceptual knowledge dimension increased, according to the 2015 and 2018 curricula. In this regard, we determined that the curricula had similar as well as different aspects, and the most number of achievements were in the conceptual knowledge dimension. The conceptual knowledge dimension is the information form consisting of information on classifications, categories, principles, generalisations, structures and models (Krathwohl, 2002).

The goal of Life Studies Course Curriculum is to introduce key concepts that would form the basis of the Science course that students would have in the future as part of the learning-teaching process as well as to help them develop life skills required and useful in their daily lives (MEB, 2009). Accordingly, this might be the reason for over-representation of the conceptual knowledge dimension compared to the other dimensions in the curricula.

We determined that there were achievements in the meta-cognitive knowledge dimension only in the 2009 curriculum. According to Schraw and Moshman (1995), meta-cognitive knowledge is the knowledge individuals have about their own cognition and about cognition in general. Teachers should focus on the meta-cognitive knowledge dimension that is crucial for individuals to be responsible for their own learning (Flavell, 1979) at these grade levels, as it forms the foundation for Science course the students are introduced to in a Life Studies class, especially middle school exams that students would take in the future. The study conducted by Barak and Shakhman (2008) emphasised the importance of meta-cognitive thinking in Science education and underlined the need for studies that would integrate this way of thinking with Life Studies education. In this context, achievements of basic education should also be at a level that would meet this need.

Based on our findings, we have the following suggestions:

- In this study, we determined Science achievements in the 2009, 2015 and 2018 Life Studies Course Curricula (Table 1, Table 2 and Table 3). Teachers and teacher candidates can benefit from the results of our study.
- The Life Studies Course Curriculum needs orientation so that it would help students develop their higher-level skills such as synthesising and analysing.
- Scholars can work on this study and conduct different research projects seeking teachers' opinions about the curriculum and evaluating achievements according to the RBT.

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