
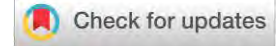


## Analysis of the questions in 11<sup>th</sup> Grade Philosophy Coursebook in terms of higher-order thinking skills

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**ABSTRACT** The present study aimed to investigate the questions included in the 11<sup>th</sup> grade Philosophy Coursebook prepared in 2018 by the Ministry of Education in Turkey in terms of higher-order thinking skills. Document analysis was utilized in the study, and frequencies and percentages were used in answering the first sub-research question. Cognitive processes domain of Revised Bloom's Taxonomy was utilized in conducting analyses to answer the second sub-research question. And Moodley's (2013) categorization supported the analyses to answer the third sub-research question. The results suggested that the distribution of warm-up, practice, discussion, text analysis, writing, and measurement and evaluation questions were organized in a similar systematic across the coursebook. As a result of the research, not only summative but also formative assessment methods were included in the coursebook. Most of the questions were in the understand level of cognitive processes. The book included only a limited number of questions on the 'apply', 'analyze', and 'create' levels included in Revised Bloom's Taxonomy. Most of the questions were designed for the mid-level of the cognitive domain and the low-level questions were the second most frequently used questions. Only 6.1 % of the questions were designed for high-levels of the cognitive domain. Last but not least sample questions for the analyze, evaluate, and create dimensions were prepared in an effort to encourage more frequent uses of such types of questions.

**Keywords:** *Philosophy education, Asking questions, Revised Bloom's Taxonomy, Higher-order thinking, Thinking skills*

### 11. Sınıf Felsefe Ders Kitabı'nda yer alan soruların üst düzey düşünme becerileri açısından incelenmesi

**ÖZ** Bu çalışmada Türkiye'de Millî Eğitim Bakanlığı tarafından 2018 yılında hazırlanan 11. sınıf Felsefe Ders Kitabı'nda yer alan soruların üst düzey düşünme becerileri açısından incelenmesi amaçlanmıştır. Araştırma doküman analizi yoluyla yapılmıştır. Araştırmanın birinci alt amacının çözümlenmesinde frekans ve yüzde kullanılmıştır. İkinci, alt amacın çözümlenmesi 2001 yılında güncellenmiş Bloom'un Bilişsel Alan Taksonomisinin bilişsel süreç boyutu doğrultusunda yapılmıştır. Üçüncü alt amacın çözümlenmesinde Moodley (2013)'in sınıflaması kullanılmıştır. Araştırma sonucunda, kitaptaki tüm ünitelerde aynı sistematiklik içerisinde hazırlık, uygulama, tartışma, metin analizi, yazma ve ölçme ve değerlendirme sorularına yer verildiği görülmüştür. Toplam değerlendirme yanında biçimlendirici değerlendirme de kullanılmıştır. Kitapta en çok anlama basamağında sorulara yer verilmiş olup; uygulama, çözümlenme, değerlendirme ve yaratma basamaklarında sorulara çok az yer verilmiştir. Soruların büyük bölümü orta bilişsel düzeye yönelik hazırlanmış olup; bu soruları alt düzey sorular izlemiştir. Kitaptaki soruların yalnızca yüzde 6,1'i üst bilişsel düzeye yönelik hazırlanmıştır. Üst bilişsel düzeyde felsefe soruları yazılmasını yaygınlaştırmak amacıyla analiz, değerlendirme ve yaratma basamaklarında felsefe soruları yazılmıştır.

**Anahtar Sözcükler:** *Felsefe eğitimi, Güncellenmiş Bloom Taksonomisi, Düşünme becerileri, Soru sorma, Üst düzey düşünme*

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## INTRODUCTION

Stating that students cannot be taught new concepts and suggesting that there is a need to ask students questions to encourage them to think (maieutic method), Socrates -the ancient Greek philosopher- highlighted the link between questions and thinking in education and the importance of these two concepts for knowledge about 2500 years ago. This method which was later on named as “Socratic Discussion” became both the basic method of philosophy and was adopted as a teaching approach. Philosophy is a discipline which includes critical, creative and extensive thinking on issues such as the meaning of existence, human nature, problem of values, the source and limits of knowledge, the aim and purpose of art, and ethical problems in science; and aims to reach the essence of events by asking questions and seeking answers. It is the most important human activity which questions the meaning of existence and generates knowledge and ideas (Loewer, 2016; Taşdelen, 2007).

The purpose of philosophy is to develop individuals’ personalities and enable them to become beneficial members of the society by breaking them free of prejudices and stereotypes (Cicioğlu, 1985). Likewise, the purpose of philosophy courses in schools is to develop students’ thinking capacity to support them in understanding the world, the society they live in, and themselves (Ünsal & Korkmaz, 2017), and contribute to the process of raising individuals who have the ability of questioning, becoming aware of problems, respecting different opinions, critical thinking, independent thinking, original thinking, and inferring. Philosophy education is a process that transforms and develops an individual. It is expected that philosophy education will enable an individual to approach even the most common situations with skepticism and questioning (Taşdelen, 2007).

Nevertheless, there are a number of problems which prevent the realization of learning outcomes in philosophy education: (i) coursebooks which have content that conveys philosophers’ views, (ii) negative perceptions of philosophy (i.e. philosophy courses teach about atheism and agnosticism), (iii) disliking philosophy courses, (iv) being disinterested in philosophy, (v) perceptions that philosophy does not contribute to one’s development, (vi) presentation of course content as a collection of abstract and theoretical information and not relating it to daily life, (vii) decreasing the importance of the philosophy course within the education system, (viii) students’ focus on passing the exams rather than learning about philosophy and the perception that philosophy is one of those courses that can be passed by memorizing content, (ix) mostly following the presentation method in teaching the course and not asking enough questions to encourage students to think, (x) encouraging students to memorize content rather than higher-order thinking (Akdağ, 2002; Alkın-Şahin & Tunca, 2015; Bowery & Beaty, 1999; Dombaycı, 2008; Kefeli, 2011; Kızıltan, 2012; Yapıcı & Kösterelioğlu, 2016). Ineffectiveness of philosophy courses that result from problems such as the ones mentioned above prevents us from raising individuals who think extensively, question, criticize, develop multiple perspectives, and have a culture of discussion (Ünsal & Korkmaz, 2017).

The main method of doing philosophy is to think. Thinking refers to cognitive functions which arise from the need to look for solutions in order to confront and overcome difficulties, and it includes making plans in relation to the outcomes, dreaming, and identifying the steps to be taken as well as their order (Dewey, 2017). Thinking goes beyond being only an affective, cognitive, social, and individual attempt (Splitter & Sharp, 1995) but it is also a skill that can be learned, practiced, and developed (Bono, 2011). Philosophical thinking, on the other hand, requires higher-order thinking skills such as in-depth and systematic thinking, conceptual questioning, critique, reasoning, analyzing, inferring, association, abstraction, and evaluation (Alkın-Şahin & Tunca, 2015; Norris, 2015; Pinto, McDonough & Boyd, 2011). In addition, it is expected that higher-order thinking skills that make up philosophical thinking will be developed through the philosophy course (Ministry of National Education [MoNE], 2018a).

One of the factors that activate higher-order thinking skills is the level of questions used in the teaching environment (Büyükalın, 2007; Kelley-Mudie & Phillips, 2016). The quality of the questions determines the quality of thinking. While factual questions direct students to remembering and memorization, in-depth questions pull ideas beneath the surface and force the individual to deal with complexities (Elder & Paul, 1998). According to Ornstein (1987), the essence of good teaching is associated with good questions. While good questions are described as questions that activate higher-order cognitive skills, low-order questions are described as questions that often require respondents to remember information (Kılıç, 2016). However, an effective lesson should include both higher-order and lower-order questions as different-level questions require different thinking processes (Büyükalın, 2007). Lower-order questions are useful for remembering information and/or events, activating students' prior knowledge, continuing classroom discussion, ensuring retention of what is learned, and creating the foundations for higher-order thinking (Anderson et al., 2010; Büyükalın, 2007; Gözütok, 2007; Günel, Kınır, & Geban, 2012; Wilen & Clegg, 1986).

In line with Bloom's Taxonomy, being able to ask students effective questions is an important factor in determining students' in-depth thinking (Seeger, Wood, & Romans, 2018). Bloom's Taxonomy is the most frequently used system to categorize questions used in relation to thinking processes in the classroom (Kracl, 2012). Bloom's Taxonomy was developed by Benjamin Bloom to evaluate course materials and test results as well as categorize learning objectives. The taxonomy was later named as Original Bloom's Taxonomy (OBT) and consisted of one dimension which included cognitive processes such as knowledge, comprehension, application, analysis, synthesis, and evaluation (Halawi, McCarthy, & Pires, 2009; Radmehr & Drake, 2017). The levels in the taxonomy are organized from concrete to abstract and simple to complex. It is assumed that the hierarchy of the taxonomy is cumulative. Each level in the taxonomy requires more complex thinking in comparison to the level before it (Anderson, 2005; Krathwohl, 2002). Changes in learning objectives and cognitive psychology over the years resulted in the need to update the OBT. The OBT was finally updated in 2001 by a group of researchers lead by Anderson and Krathwohl (Anderson, 2005).

Revised Bloom's Taxonomy (RBT) consists of two domains; knowledge and cognitive. Knowledge domain includes the following dimensions; facts, concepts, procedures, and metacognition (Brookhart, 2010). Cognitive domain, on the other hand, includes various thinking skills (remember, understand, apply, analyze, evaluate, and create) which can be hierarchically categorized from lower-order (remember) to higher-order (create) skills (Magas, Gruppen, Barrett, Dedhia, & Sandhu, 2017). Remember refers to recognizing concepts and facts, understand relates to the process in which learners start to make sense out of the learning input, apply refers to being able to follow procedures in a given situation, analyze deals with separating knowledge into manageable pieces and presenting the relationships between certain pieces or all pieces as a whole, evaluate aims to make a judgement based on criteria selected for a pre-determined goal, and create refers to the process in which a new product is produced by integrating different pieces of information (Brookhart, 2010).

The hierarchy between the levels of the revised taxonomy is not as strict as the OBT making the revised version more flexible. Generally, higher levels require more complex skills or the realization of success than the lower ones (Krathwohl, 2002). Each level within the RBT has subcategories. A total of 11 subcategories are available in the knowledge domain and 19 in the cognitive domain. While OBT focuses on categories, RBT's focus is on subcategories (Bümen, 2006). The cognitive domain is generally characterized as "lower-order" and "higher-order" and sometimes an additional "medium-order" is included in categorizations (McMillan, 2015). Similarly, Moodley (2013) categorized RBT into three levels; "lower-order", "medium-order", and "higher-order". In Moodley's (2013) study, remember dimension is classified as a lower-order skill; understand and apply as medium-order skills; and analysis, evaluate, and create as higher-order skills.

In this research, Revised Bloom's Taxonomy and Moodley's categorizations of RBT were used to investigate the questions regarding the cognitive level. The reason for using the Revised Bloom's Taxonomy was due to (i) its clarity in terms of definitions of categories and key concepts, (ii) being one

of the most frequently used taxonomies to develop higher-order thinking skills (Brookhart, 2010; Büyükalın, 2007; Halawi et al., 2009), and (iii) having been frequently utilized in research evaluating higher-order thinking questions (Kracl, 2012; Magas et al., 2017; Moodley, 2013).

In Karl Jaspers' words "its [philosophy's] questions are more essential than its answers" because questions encourage people to think while answers signal the termination of the thinking process. The act of thinking only continues if a question produces another question (Kelley-Mudie & Philips, 2016). Therefore, philosophy is an activity of asking questions (Topdemir, 2009). In line with this, the history of philosophy is a collection of unsolvable questions rather than solvable ones (Taşdelen, 2007).

Questions used in philosophy education should not come to an end even after the process of analysing them. Instead, such questions should point out to possible answers, an uncertainty, or confession that the questions are difficult so that the search for new answers can continue (Taşdelen, 2007; Uygur, 1964). While philosophical questions are not without answers, the answers they have are not strong enough to eliminate the questions (Noddings, 2017; Taşdelen, 2007). The answers of philosophy and science are different from one another. Answers in science have the characteristic of eliminating the question and the teaching of answers is important in science education. While answers in science are objective, answers in philosophy are subjective (Günay, 2004; Taşdelen, 2007). Subjective answers not only provide inconclusive answers but also generate new questions and discussion areas. Therefore, questions used in philosophy should allow subjective answers. Since questions of philosophy cannot reach conclusive answers, such questions are not treated as elements of teaching but rather as elements of ideas (Taşdelen, 2007).

On a different note, cultural perspective should be taken into consideration whilst preparing questions for philosophy education. Such questions should be able to face racism, sexism, and religious and political beliefs and practices (Bowery & Beaty, 1999).

Philosophy education and classroom activities in different countries are generally based on the coursebook used in the lesson (Choi, 2002; Pinto, Boyd, & McDonough, 2009; Pinto et al., 2011). Although there have been many developments in teaching methods and instructional technologies, coursebooks are still considered as fundamental teaching sources (Höttecke & Silva, 2011). Likewise, it has been found that the philosophy coursebook prepared by the Ministry of National Education (MoNE) is the main teaching resource used in philosophy courses offered in Turkish high schools (Ergün & Yapıcı, 2006). In this sense, it is expected that the questions asked in the lesson will be selected from those questions included in the coursebook. Therefore, the questions included in the philosophy coursebook play an important role in activating students' higher-order thinking skills. Moreover, coursebooks are designed in line with curricula.

In Turkey the Philosophy Course Curriculum has been revised in 2018 due to the developments in science and technology which affected the skills that the society expects individuals to be equipped with. The 2018 Philosophy Course Curriculum in Turkey aims to equip students with skills such as the knowledge of philosophy concepts, questioning, reasoning, argumentation, critical and analytical thinking, generating original ideas, philosophy-literacy, writing, and being able to express oneself. The curriculum suggests putting various higher-order thinking skills such as questioning, critical and analytical thinking, interpreting, and dialogic reasoning into use in philosophy courses in order to develop the specified competencies (MoNE, 2018a).

Furthermore, the need to utilize questions that allow the assessment of higher-order thinking skills such as questioning, interpreting, applying, analyzing, evaluating, and synthesizing is underlined in the measurement and evaluation dimension (MoNE, 2018a). It is, therefore, important that questions, which can activate the higher-order thinking skills specified in the curriculum, are included in the philosophy coursebook designed by MoNE in Turkey.

The link between philosophy education and higher-order thinking questions attracted author's attention and conducting a research study on the use of higher-order thinking questions in philosophy education was deemed necessary. The aim of the present study is to investigate questions used in philosophy education in terms of higher-order thinking skills. In order to reach this aim, answers to the following research questions are sought:

- (1) What are the characteristics of the questions included in the 11<sup>th</sup> Grade Philosophy Coursebook?
- (2) At what frequencies are the questions in the 11<sup>th</sup> Grade Philosophy Coursebook distributed in terms of the cognitive processes domain of RBT?
- (3) What is the inclusion ratio of higher-order thinking skills in the 11<sup>th</sup> Grade Philosophy Coursebook?

Not only has there been only a limited number of studies on this subject but also the studies conducted so far were found to focus on students' perceptions of the philosophy course (Akdağ, 2002; Yapıcı & Kösterelioğlu, 2016), the link between philosophy education and critical thinking (Alkın-Şahin & Tunca, 2015; Bozoğlu, 2008), the philosophy curriculum and its taxonomic analysis (Ünsal & Korkmaz, 2017; Norris, 2015), and the coursebooks used in philosophy courses (Pinto, et al., 2011). To the best of the author's knowledge, no previous study has investigated the type of questions included in philosophy coursebooks.

The present study is significant since it aims to fill in this niche in the literature. Moreover, the study is also significant since it contributes to the presentation of the distribution of the questions used in philosophy education in terms of the cognitive processes domain and higher-order thinking skills, identifying the current situation as well as the shortcomings of the book, forming the basis for future improvements in the book, and monitoring the developments on this subject matter.

## **METHODOLOGY**

### **Research Design**

Document analysis was used in the present study. Document analysis is a systematic procedure used to analyze and evaluate printed as well as electronic materials (Bowen, 2009). Similar to other analytical methods in qualitative research, document analysis requires interpreting, developing understanding, and forming empirical knowledge based on the analysis of materials (Bowen, 2009; Corbin & Strauss, 2008).

The document analyzed in the present study, was the questions in 11<sup>th</sup> Grade Philosophy Coursebook designed in line with the revised Philosophy Course Curriculum and published by MoNE (MoNE, 2018b) to be used in Turkish high schools. Only the coursebooks approved by the MoNE can be used in Turkish schools and those books are distributed to students and teachers free of charge. The coursebook analyzed in the study was the 11<sup>th</sup> Grade Philosophy Coursebook which was the only book prepared for the Philosophy Course in Turkey indicating that it was commonly used in schools. The coursebook included a total of 294 questions within five units.

### **The Role of the Researcher**

The author of the present study completed her undergraduate study in the field of philosophy teaching and has a PhD in the field of curriculum and instruction. The author has sufficient knowledge about the possible answers that can be given to the questions analyzed in the study since she taught philosophy for six years at the 11<sup>th</sup> grade in high schools. Moreover, the author also had experience in using the RBT for analysis.

## Data Analysis

Frequencies and percentages were used in analyzing the first research question. Details regarding to which categories the questions in the coursebook belonged were presented using frequencies. Analyses for answering second research question were conducted in line with the cognitive domain of RBT.

While some researchers have utilized both domains of the RBT to conduct their analyses (Şanlı, 2019; Virranmäki, Valta-Hulkkonen, & Pellikka, 2020), other researchers utilized either the knowledge domain (Radmehr & Drake, 2017) or the cognitive domain (Davila & Talanquer, 2010; Phillips, Smith, & Straus, 2013; Renaud & Murray, 2007; Thompson, Kelso, Ward, Wines, & Hanna, 2016) based on the objectives of their research. Only the cognitive domain of the RTB was utilized in the present research since the focus of research was to analyze philosophy questions in terms of higher-order thinking skills which were part of the cognitive domain (Airasian & Miranda, 2002; Krathwohl, 2002).

The following steps were followed to analyze the questions in the coursebook:

- (I) Each question in the coursebook was treated as a unit of analysis.
- (II) An analysis table (see Appendix 1) was prepared utilizing various studies such as Anderson (2005), Anderson et al. (2010), Krathwohl (2002), and Turgut & Baykul (2015). The table included descriptions, alternative names, and sample questions in relation to the dimensions within the cognitive processes domain of RBT. Additionally, the relationships as well as differences between levels that can be confused with one another were explained.
- (III) Analyses were conducted considering the sub-categories the RBT provided explanations with regards to what each sub-category represented.
- (IV) Afterwards, the criteria for coding was decided as: (i) If unsure to decide between two categories to code a question (i.e. understand and analyze) then the question will be coded in the highest cognitive level (analyze in the given case) as suggested by Anderson (2005). (ii) Whether the answers expected to be given to the questions are provided in previous sections of the book will be checked. If the answer to a given question is provided in a previous section then the question will be coded as “remember”.
- (V) Both the analysis table and possible answers that can be given to the questions were considered while coding the data. The sources of answers were treated as important clues to decide the cognitive levels of the questions (Erdoğan, 2017).
- (VI) The results were presented according to the categories. The total number of questions in the sub-categories of a given category were evaluated as the frequency of the category.

One of the questions (“Based on the idea of optimism included in the text, provide an answer to whether theoretical discussions without practice constitute an obstacle for using one’s mind”, p. 109) were excluded from the analysis since it was found to be ambiguous, therefore, the total number of questions categorized were 293.

Sample questions that were categorized in the analysis are presented in Table 1. Details of frequencies and percentages with regards to each question type are given in the results section.

Table 1.  
*Sample questions*

Cognitive Dimensions	Sample Questions
Remember	*Which is the first civilization that managed to transform ideas into written culture by inscribing “The Epic of Gilgamesh and the Code of Hammurabi” onto tablets? A) Indian B) Chinese C) Persian D) Egyptian E) Sumerian
Understand	*What are the main differences between patristic philosophy and scholastic philosophy?
Apply	*Please discuss the listed questions [What is justice? What is patience? What is honesty?] following the Socratic method. Note down the defended and invalidated views (including the reasons for their invalidation) into the blank spaces provided below.
Analyze	*In his work titled “Applause and Relationships”, Onur Uca asked two types of questions to the employees of a factory. A) Do you think justice means splitting two chocolates between two children equally or giving both chocolates to the winner of the race between those children? B) A decision was made to pay employees premiums. How the premiums should be distributed, equally or based on employees’ positions in the workplace? Answers to the first question indicated that the chocolates should be equally distributed between the children and children should not be entered into a race. On the other hand, answers to the second question indicated that premiums should be distributed in line with the positions of the employees suggesting that the perception of justice in the workplace is perceived differently. Answers to the question were not emotional in terms of professionalism or work ethics in the administration of justice. What emphasis, if any, has been made to the concepts of justice and equality in both questions?
Evaluate	*Based on the text, can Kant’s “work ethics” be considered as a universal moral law considering today’s world? Evaluate?
Create	*Write an original utopia taking the concept and types of utopia, the purpose of their creation, and the present social order into consideration.

Moodley’s (2013) categorization organized in line with the RBT was utilized to analyze the data in the search to find an answer to the third sub-research question. In this categorization, remember level is classified as a lower-order skill; understand and apply as medium-order skills; and analysis, evaluate, and create as higher-order skills. The results of the analysis were presented in frequencies and percentages.

In order to establish the reliability of the study, two experts with experience in conducting analyses based on RBT (a philosophy and a curriculum development subject matter expert) were recruited to analyze the questions in accordance with the Analysis Table. Following Miles and Huberman’s (1994) formula ( $\text{Reliability} = \frac{\text{the number of agreements}}{\text{the number of agreements} + \text{the number of disagreements}}$ ), inter-rater reliability levels between coders and the researcher were calculated as .96 and .91. Miles and Huberman (1994) state that 80 % and above levels of agreement between coders is sufficient. The inter-coder reliability score of this research establishes the consistency of the study. The codes in disagreement were discussed with the coders and consensus was reached. In an effort to establish validity, analyses were conducted using an analysis table in which descriptions of categories, examples, relationships and differences with other categories were provided, and the steps of conducting analyses are explained and exemplified.

## RESULTS

### Characteristics of Questions

Results on the frequency of questions in terms of their purpose, question type, and behavioral domain are presented under this heading. In terms of their purpose, the questions in the coursebook were categorized as following; warm-up, practice, discussion, text analysis, writing, and measurement and

evaluation questions. Details on the distribution of questions in terms of their purpose and the units of the coursebook are presented in Table 2.

Table 2.  
*The distribution of questions by units and titles*

Question types in terms of their purpose	Philosophy between 6th Century B.C. and 2nd Century A.D.	Philosophy between 2nd and 15th Century	Philosophy between 15 <sup>th</sup> and 17th Century	Philosophy between 18th and 19th Century	Philosophy in the 20th Century	Total
	Frequency of the distribution of questions in terms of their purpose (total number of questions)					
Warm-up Questions	1(3)	1(3)	1(3)	1(3)	1(4)	5(16)
Discussion Questions	2(3)	2(2)	3(4)	1(1)	4(5)	12(17)
Practice Questions	7(13)	6(9)	5(16)	7(14)	8(15)	33(64)
Text Analysis Questions	3(12)	5(20)	3(12)	3(12)	4(16)	18(72)
Writing Questions	1(1)	1(1)	1(1)	1(1)	1(1)	5(5)
Measurement and Evaluation Questions	1(25)	1(23)	1(22)	1(24)	1(25)	5(120)
Total	15(57)	16(58)	14(58)	14(55)	19(66)	78(294)

The analysis of Table 2 indicates that all question categories in terms of their purpose were included across each unit of the book, and the number of questions each unit were found to be close to others. The 294 questions analyzed in this study were dispersed across 78 different points in the coursebook which indicated that an effort was made to make frequent uses of questions in lessons. The most frequently used question categories in terms of their purpose were; practice, text-analysis, and discussion questions respectively. All of those questions were prepared based on a context (text). On a different note, the fact that the number of questions in categories other than measurement and evaluation was high ( $f= 174$ ) was an indicator of the importance given to not only summative but also formative assessment.

The analysis of question types suggested that all of the questions ( $f= 176$ ) in the warm-up, discussion, text-analysis, and writing activities were prepared as open-ended questions. As for the questions within the measurement and evaluation domain, 20 questions (16.6%) were fill in the blanks, 26 (21.6%) were matching, 40 (33.3%) were open-ended, and 34 (28.3%) were multiple-choice questions.

### Distribution of the questions in terms of the cognitive processes

Results of the analysis of the questions included in the Philosophy Coursebook based on Revised Bloom's Taxonomy is presented in Table 3.

Table 3.  
*Distribution of questions based on the cognitive processes domain of Revised Bloom's Taxonomy*

Cognitive dimensions	Philosophy between 6th Century B.C. and 2nd Century A.D.		Philosophy between 2nd and 15th Century		Philosophy between 15 <sup>th</sup> and 17th Century		Philosophy between 18th and 19th Century		Philosophy in the 20th Century		Total	
	f	%	f	%	f	%	f	%	f	%	f	%
	Remember	10	17.5	13	22.4	13	22.4	13	24.1	17	25.8	66
Understand	42	73.7	41	70.7	42	72.4	37	68.5	42	63.6	204	69.6
Apply	3	5.3	1	1.7	-	-	1	1.9	-	-	5	1.7
Analyze	1	1.8	1	1.7	-	-	1	1.9	4	6.1	7	2.4
Evaluate	-	-	1	1.7	1	1.7	1	1.9	1	1.5	4	1.4
Create	1	1.8	1	1.7	2	3.4	1	1.9	2	3	7	2.4
Total	57	100	58	100	58	100	54	100	66	100	293	100



It is worth noting that most of the questions were found to be in the understand dimension (see Table 3). Moreover, the distribution of questions was similar across units. Nevertheless, it was observed that there were no questions categorized in the evaluation dimension within the “Philosophy between 6th Century B.C. and 2nd Century A.D.” unit, in the apply or analyze dimensions within the “Philosophy between 15th and 17th Century” unit, or the apply dimension within the “Philosophy in the 20th Century” unit. 22.5% of the questions were in the remember, 69.6% in the understand, 1.7% in the apply, 2.4% in the analyze, 1.4% in the evaluate, and 2.4% in the create dimension.

### Distribution of the questions based on thinking skills

Questions were also examined based on levels of thinking skills required to answer them and distributions were calculated (see Table 4).

Table 4.

*Distribution of the questions based on thinking skills*

Level of Thinking Skills	Philosophy between 6th Century B.C. and 2nd Century A.D.		Philosophy between 2nd and 15th Century		Philosophy between 15th and 17th Century		Philosophy between 18th and 19th Century		Philosophy in the 20th Century		Total	
	f	%	F	%	f	%	f	%	f	%	f	%
	Lower-order	10	17.5	13	22.4	13	22.4	13	24.1	17	25.8	66
Medium-order	45	78.9	42	72.4	42	72.4	38	70.4	42	63.6	209	71.3
Higher-order	2	3.5	3	5.2	3	5.2	3	5.6	7	10.6	18	6.1
Total	57	100	58	100	58	100	54	100	66	100	293	100

Analysis of Table 4 suggested that the number of questions that require higher-order thinking skills were close to one another across units. The greatest number of questions categorized as requiring “higher-order skills” were included in the “Philosophy in the 20th Century” unit, and the least in the “Philosophy between 2nd and 15th Century” unit. 22.5% of the questions included in the coursebook were found to have been prepared for activating lower-order, 71.3% medium-order, and 6.1% higher-order thinking skills.

## DISCUSSION AND CONCLUSION

The results of the present study showed that all of the units in the 11<sup>th</sup> Grade Philosophy Coursebook included warm-up, practice, discussion, text-analysis, writing, and measurement and evaluation questions. In terms of their purpose, the most frequently used questions were practice, text-analysis, and discussion questions respectively. Additionally, it was found that an emphasis was placed not only summative but also formative assessment. Formative assessment has a function to increase learning opportunities (Black & William, 1998); therefore, inclusion of this form of assessment in the book is important for student success.

Frequent uses of questions were made throughout the book. The frequency of assessment is one of the important factors that increase students’ success. Moreover, students’ learning and thinking can be evaluated through questions (Marzano, 2006). Making frequent uses of questions in the book is significant since it encourages students to examine issues and think about those issues which increase the chances of academic success. All of the questions prepared for formative assessment in the coursebook (warm-up, discussion, practice, text analysis, and writing questions) were found to be open-ended questions. On the other hand, measurement and evaluation questions (prepared for summative assessment) included open-ended, multiple-choice, matching, and fill in the blank questions. When assessing student learning, it becomes necessary to utilize various types of questions (Berberoğlu, 2006). For example, question types such as multiple-choice and true/false questions fail in addressing the

measurement of a number of behavioral domains when evaluating student learning (Kutlu, Doğan, & Karakaya, 2014). Nevertheless, such question types have certain advantages such as requiring less time to complete and enabling an easy and fairly objective process of evaluation (Temizkan & Sallabaş, 2011). It is considered that the inclusion of various types of questions in the coursebook is advantages in terms of overcoming the limitations of one type of question by using another type.

22.5% of the questions in the book were found to be in the remember dimension of the cognitive processes domain within the RBT. Questions measuring the remember dimension contribute to increasing the permanence of learning and create the basis for medium- and high-order questions (Anderson et al., 2010; Büyükalan, 2007). About 7 out of every 10 questions included in the book, on the other hand, were found to be in the understand dimension. The fact that the number of questions in the understand dimension were high can be related to -since those questions were mostly prepared based on a text- the need to include questions that require understanding texts, comparing different viewpoints within the text, and explaining the concepts and ideas within the text. Nevertheless, including that many questions in the understand dimension has the potential to prevent rather than contribute to students' development of higher-order thinking skills. There were only few questions prepared in the apply, analyze, evaluate, and create dimensions. According to Cevizci (1997) philosophy is not a discipline appropriate for practice but is rather more appropriate for thinking. Therefore, it is possible that the number of questions in the apply dimension were low because of that characteristic of the philosophy course. In spite of this, however, philosophical thinking is a process that requires analysis and synthesis (Cevizci, 1997). The results of the study showed that this principle was not taken into consideration in the philosophy coursebook. Because of its nature, philosophy is a discipline that utilizes in-depth and comprehensive thinking, and questioning as a method. This outcome, therefore, indicates the need to prepare questions in the analyze and evaluate dimensions so that students' use of such skills can be activated.

One of the positive aspects of the coursebook was the inclusion of questions at the end of each unit which ask students to write an original philosophical essay. However, the ratio of such questions (in the create dimension) was quite low (2.4%) in the book. This situation is an indicator that the conditions necessary for the development of creative thinking skills specified in the curriculum have not been created. Teachers participating in Oktay and Şakar's (2014) study, similarly, criticized the 2009 Philosophy Course Curriculum for not nurturing creativity of students. Although the Philosophy Course Curriculum has changed over time, it has been observed in the present study that the inability of the philosophy coursebook to contribute to the process of raising creative individuals continues. It is, thus, suggested that the number of questions in the create dimension within the book is increased.

Most of the questions in the coursebook were found to have been prepared for medium-order thinking skills and this was followed by questions prepared for lower-order thinking skills. While the higher number of questions prepared for medium-order thinking skills compared to those prepared for lower-order thinking skills can be interpreted as a positive finding, the ratio of questions prepared for higher-order thinking skills was found to be quite low (6,1 %). This outcome indicates that the questions in the coursebook were not prepared systematically or based on taxonomy, and that coursebook authors were not competent enough to write questions for activating higher-order thinking skills. Preparing coursebook questions in accordance with taxonomy can contribute towards processes such as facilitating students' practice and preventing the accumulation of questions in certain cognitive dimensions. Moreover, such a strategy can provide teachers with more question options to select from based on the cognitive dimension(s) that they want their students to do practice with (Büyükalan, 2007). Thus, a training program can be offered to philosophy coursebook authors to develop their understanding of the cognitive domain and increase their competencies to be able to prepare questions to activate higher-order thinking skills in line with the cognitive domain classifications.

Asking questions in lessons which activate higher-order thinking skills is a factor that increases students' academic success (Cimer, 2007). Therefore, a suggestion to decrease the number of questions activating medium-order thinking skills and increase the number of those that activate higher-order thinking skills

can be made in an effort to enable students develop skills such as critical and analytical thinking, creativeness, developing original ideas, philosophy-literacy, writing, and being able to express oneself all of which have been specified in the 2018 Philosophy Course Curriculum. Philosophy questions to serve as sample (“Promises Should be Kept” for the analyze; “Enigma” for the evaluate, and “Need or Desire” for the create dimensions) have, therefore, been prepared for activating higher-order thinking skills (see below).

Similar to other disciplines, it is important to prepare questions taking learning outcomes into account. Therefore, learning outcomes specified in the 11<sup>th</sup> Grade Philosophy Course Curriculum were analyzed in accordance with the RBT and a learning outcome for the analyze and another for the evaluate dimension were selected and sample questions were written for those learning outcomes. Since no learning outcome was identified to be in the create dimension, the sample question for this dimension was prepared in line with the learning outcome selected for the evaluate dimension.

*Learning Outcome:* In the light of sample philosophical texts, learners analyze the philosophical views of philosophers who lived between 6th Century B.C. and 2nd Century A.D.

### *PROMISES SHOULD BE KEPT*

*Generalization:* All birds can fly.

*Counter-example:* Penguins are birds, but they cannot fly.

*New generalization:* Birds, except penguins, can fly. / Not all birds can fly. / Some birds can fly.

You can use the above example in answering the question below.

Each of the following propositions is a generalization: “*Those who study for their lessons become successful*”, “*Soldiers are brave*”, “*Promises must be kept*”. Most of us think that we should keep our promises. Is this generalization true in all cases? Plato, in his book titled “*The Republic*”, asks this question in Socrates’s -his teacher- words and develops a counter-example: “*For example, if we agree on keeping the gun of a sane friend with a promise to give it back and then this friend goes crazy (as in losing his mental health), and he asks his gun back, would it be right to give back the gun?*”. Most people answer this question: “*No, it (the gun) should not be returned under these circumstances*”.

*QUESTION:* Taking this situation which does not fit the initial proposition “Promises should be kept” into consideration, (a) write a new generalization and (b) develop a counter-example to the new generalization you have written.

*Learning outcome:* Learners philosophically evaluate sample ideas and arguments of the 20th century philosophy

### *ENIGMA*

In “*The Imitation Game: Enigma*” directed by Morten Tyldum, Alan Turing and his team -who work for the British Army- decrypt the Enigma (a cipher machine used by the Nazis during World War 2 to send and receive secret messages) after a two-year long study and find out that an attack on the British Navy is to take place in half an hour. There are 500 people in the fleet that will be attacked and one of those soldiers is a lieutenant who is the brother of one of the engineers in Alan’s team. The engineer requests that the information of the attack be shared so that the 500 soldiers -including his brother- can survive. However, if this information is shared then Germans could understand that the Enigma is decrypted and they can change the code which means the work Alan and his team have carried out over two years will be in vain. Alan Turing, the leader, on the other hand, proposes the following: The attack plan they have learned about should not be shared so that the Germans do not understand they (the

British) have decrypted the code and, following statistical analyses, only attacks in critical areas -no other attacks- be shared with others. Dewey believed that there are no absolute criteria when solving problems that require making moral decisions. When making moral decisions, individuals encounter incomparable options and have to make a choice. Dewey claimed that the questions science utilized in physics can also be used in ethics (Acar-Erdol, 2019, p.261-262).

**QUESTION:** Following John Dewey's scientific method criteria, evaluate the ethical dilemma titled "Enigma" and make a decision.

#### NEED OR DESIRE

Write a philosophical essay on the following topic.

“ ‘We have very few real needs, but our wants are destroying us.’ Do you agree? In your response, draw on relevant philosophical sources, including at least one of the following: Sartre, Russell, Wittgenstein, Camus.” (Victorian Curriculum and Assessment Authority, 2018).

Most of the questions in the coursebook were “context-based questions” and “continuous texts” were used to create the context. Although the characteristics of the mentioned texts are outside the scope of the present study, those texts were not found to have sufficient clarity or comprehensiveness to enable the process of answering the questions or making inferences. Future research, therefore, can examine the texts in terms of clarity and comprehensiveness.

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## APPENDIX 1 Analysis Table

Cognitive processes	Alternative names	Definitions, Examples, Relationships, and Differences
<b>1. REMEMBER</b>		<b>Accessing related information in the long-term memory</b> -Students are asked to complete the given task without making any changes or making limited changes in the conditions.
<b>1.1 Recognizing</b>	Identifying	* Recognizing important dates in the history of the nation.
<b>1.2 Recalling</b>	Retrieving	* Remembering important dates in the history of the nation.
<b>2. UNDERSTAND</b>		<b>Making sense of teaching-related messages that are received in verbal, written, and visual formats</b> - Students reach the understand level when they create links between the newly acquired knowledge and their prior knowledge.
<b>2.1 Interpreting</b>	Clarifying, Paraphrasing, Translating, Presenting	- Paraphrasing important statements and documents using their own sentences. * Paraphrasing a well-known document like the Universal Declaration of Human Rights in their own words.
<b>2.2 Exemplifying</b>	Illustrating, Instantiating	- Finding a special example or way of representation to exemplify a concept or a principle. * Giving examples to various styles of oil-painting.
<b>2.3 Classifying</b>	Categorizing, Subsuming	* Classifying observed or described mental illnesses. * Asking students to watch the recorded behaviors of an individual who has a mental illness and identify what the displayed mental behavior is.
<b>2.4 Summarizing</b>	Abstracting, Generalizing	* Summarizing important contributions of distinguished scientists after reading their articles. * Finding an appropriate title to a given text.
<b>2.5 Inferring</b>	Concluding, Extrapolating, Interpolating, Predicting	- Finding a manifested pattern from a series of examples or cases (i.e. repeated order). * Deducing a grammar rule from given examples when learning a foreign language. <b>The difference between inferring and attributing:</b> Attributing is related to identifying an author's viewpoint. Inferring, on the other hand, relates to utilizing the presented information to identify the manifested pattern.
<b>2.6 Comparing</b>	Matching, Contrasting, Mapping,	- Finding similarities and/or differences between two ideas, objects and so on. * From which viewpoint the electrical circuit resembles to the flow of water through the pipe?
<b>2.7 Explaining</b>	Constructing models	- The step of explaining is realized when students become able to create models about the cause-effect relationships within a given system and utilize the model. * Being able to explain the reasons of significant event taking place in the 18 <sup>th</sup> Century. * What would happen if the diameter of the cylinder within a bicycle pump is increased?
<b>3. APPLY</b>		<b>Apply refers to following or utilizing procedures within a given case.</b>
<b>3.1 Executing</b>	Carrying out	- Applying the procedures into a familiar task. * Dividing a multi-digit whole number into another multi-digit whole number.
<b>3.2 Implementing</b>	Using	- Utilizing procedures in new cases that are applicable. * Identifying the situations where Newton's second law is applicable. <b>Relationship with other categories:</b> Utilizing has a relationship with other cognitive process categories such as understand and create.



Cognitive processes	Alternative names	Definitions, Examples, Relationships, and Differences
<b>4. ANALYZE</b>		<p><b>Diving a material into components that make it and identifying the relationship between components and the whole.</b></p> <p>- Includes the steps of analyzing a product, finding out the components that make up the product (separation), understanding existing relationships among those components and their organization as well as the process of how the product is formed.</p> <p><b>Relationship with other categories:</b> Analyze is a mental process between the levels of understand and evaluate.</p>
<b>4.1 Differentiating</b>	Distinguishing, Discriminating, Examining in detail, Selecting, Emphasizing, Focusing	<p>- Differentiating between the related/unrelated or important/unimportant parts of the presented material.</p> <p>* Learning how to identify the main points in a research report.</p> <p>* Selecting the main steps within a text that explains how something is done. In relation to this, students can be asked to read a chapter in the book which explains how lightening is formed and then identify the main steps of this process (i.e. the creation of clouds thanks to the moisture in the air, the formation of up and down air movements within the cloud, the separation of electricity loaded droplets, and so on).</p> <p><b>Differences from other categories:</b> Differentiating is different from other cognitive processes related to understand. This is because it is related to structural organization of things and more specifically to how the components are in harmony with the whole. The relation of the components to the whole forms the basis in differentiating. Understand, on the other hand, is about understanding a product as a whole. It is also different from comparison. For example, the seeds are related but the colors and shapes are unrelated when separating apples and oranges as fruits. When making comparisons, all criteria (seed, color, and shape) are interrelated.</p>
<b>4.2 Organizing</b>	Realizing the whole and integrating, Identifying the main points, Identifying with, Structuring, Ensuring consistency	<p>- In organizing, students are able to identify the systematic relationships between the components that make up a whole in a given situation or problem.</p> <p>- In organizing, the material under investigation is presented using a table, matrix, or a hierarchical diagram.</p> <p>* Learning to analyze research reports under four main sections which are; hypothesis, method, data, and results. Students can be asked to identify the main points of the report.</p>
<b>4.3 Attributing</b>	Referring, Deconstructing, Assigning	<p>- This step is realized when students are able to realize their own points of view, biases and values that lie in the heart of communication. Attributing includes the process in which students break apart the structure of the presented material in an effort to understand the intention(s) of the author.</p> <p>* Asking whether a report on human learning has been written by a behavioral or cognitive psychologist.</p> <p>* Which of the following options is the purpose of the author in writing the text you read on Amazon rainforests?</p> <p>a) Presenting factual information on Amazon rainforests</p> <p>b) Warning the reader about the need to protect rainforests</p> <p>c) Showing the economic advantage of creating rainforests</p> <p>d) Expressing the benefits of creating rainforests for human beings</p> <p><b>Differences from other categories:</b> "Attributing focuses solely on the pragmatic issue of determining the author's point of view or intention, whereas inferring focuses on the issue of inducing a pattern based on presented information. Another way of differentiating between these two is that attributing is broadly applicable to situations in which one must "read between the lines/" especially when one is seeking to determine an author's point of view. Inferring, on the other hand, occurs in a context that supplies an expectation of what is to be inferred." (Anderson et al., 2010, p.74).</p>

Cognitive processes	Alternative names	Definitions, Examples, Relationships, and Differences
<b>5. EVALUATE</b>		<p><b>Making judgements based on criteria and standards.</b></p> <ul style="list-style-type: none"> <li>- Students can be asked to develop their own criteria to be used in evaluation.</li> <li>* Does this machine function at the expected efficiency?</li> <li>* Is this the best method to realize the objective?</li> <li>* Is this approach more economic compared to others?</li> </ul> <p><b>Difference from other categories:</b> Having performance standards based on clearly defined criteria is what distinguishes evaluate from other judgements that students make.</p>
<b>5.1 Checking</b>	Coordinating, Monitoring, Testing, Examining, Finding, Controlling internal consistency	<ul style="list-style-type: none"> <li>- Identifying mismatches in a given process or product, revealing whether there is internal consistency in a given process or product, and anticipating the extent to which a certain activity will be effective in a given process.</li> <li>* Students are asked to read a report on a chemistry experiment and then identify whether the results reached in the experiment are in fact results that can be reached through observations recorded in the experiment.</li> </ul>
<b>5.2 Critiquing</b>	Judging	<ul style="list-style-type: none"> <li>- Revealing the mismatch between a product and <b>external criteria</b>, identifying the match between the product and external criteria, and identifying whether an activity is appropriate for a given problem.</li> <li>* Identifying which of the two methods are the most appropriate to solve a given problem.</li> <li>* Judging the effectiveness of “abolishing the rule of scoring students” as a solution to the problem of “how to develop K-12 education”.</li> </ul>
<b>6. CREATE</b>		<p><b>Creating a new and original product by gathering components in an appropriate order</b></p> <p><b>Difference from other categories:</b> Writing compositions, not all the time but frequently, is accepted as requiring cognitive processes in relation to create level. For example, manuscripts which represents remembering ideas or interpretation of materials do not include the level of create.</p>
<b>6.1 Generating</b>	Hypothesizing	<ul style="list-style-type: none"> <li>- Developing new hypotheses based on criteria.</li> <li>* Students can be asked to propose as many solutions as they can think about in order to ensure that everyone in the society has a health insurance.</li> <li>* What alternative methods can you use in order to identify the whole numbers that make up 60 when they are multiplied with each other?</li> </ul> <p><b>Difference from other categories:</b> Create is used in a limited meaning here. Similarly, understand level requires creating processes which include translating, exemplifying, summarizing, inferring, classifying, comparing, and explaining. On the other hand, the goal of understand is often closed-ended, in other words, the goal is to reach a certain meaning. In contrast, generating as part of the create level is open-ended indicating availability of various possible outcomes.</p>
<b>6.2 Planning</b>	Designing, Regulating	<ul style="list-style-type: none"> <li>* Students can be asked to outline and present the steps they would follow in a research report writing assignment on the reasons of the violence against women.</li> </ul>
<b>6.3 Producing</b>	Creating, Constructing	<ul style="list-style-type: none"> <li>* Creating symbiotic relationships for certain species in line with certain objectives.</li> <li>* Inventing products.</li> </ul>

## TÜRKÇE GENİŞLETİLMİŞ ÖZET

Antik Yunan filozofu Sokrates, öğrencilere yeni bir şey öğretilmeyeceğini, onlara sorular sorarak düşüncelerini doğurtmak (maiotik yöntem) gerektiğini belirterek, eğitimde soru ile düşünme arasındaki bağlantıyı ve bilgi için bu iki ögenin önemini yaklaşık 2500 yıl önce ortaya koymuştur. Daha sonra 'Sokratik Tartışma' olarak adlandırılan bu yöntem hem felsefenin temel yöntemi olmuş hem de öğretim yaklaşımları arasında yerini almıştır. Felsefe, varlığın anlamını sorgulayan ve bu konuda bilgi ve düşünce üreten en önemli insan etkinliğidir (Loewer, 2016; Taşdelen, 2007). Felsefe yapmanın temel yöntemi düşündürmektir. Felsefi düşünme, derinlemesine ve sistematik düşünme, kavramsal sorgulama, eleştirme, muhakeme, analiz etme, çıkarım yapma, ilişkilendirme, soyutlama, değerlendirme gibi üst düzey düşünme becerilerini gerektirmektedir (Alkın-Şahin ve Tunca, 2015; Norris, 2015; Pinto, McDonough ve Boyd, 2011) ve felsefi düşünceyi oluşturan üst düzey düşünme becerilerinin felsefe dersi aracılığıyla geliştirilmesi beklenmektedir (MEB, 2018a).

Üst düzey düşünme becerilerini harekete geçiren unsurlardan biri eğitim ortamında kullanılan soruların düzeyidir (Büyükalın, 2007; Kelley-Mudie ve Phillips, 2016). Soruların kalitesi düşünmenin kalitesini belirlemektedir. Olgusal sorular, öğrencileri hatırlamaya ve ezberlemeye yöneltirken; derin sorular, düşünceleri yüzeyin altına çekmekte ve bireyi karmaşıklıkla baş etmeye zorlamaktadır (Elder ve Paul, 1998). İyi sorular öğrencide üst düzey bilişsel becerileri tetikleyen sorular olarak tanımlanırken, düşük seviye sorular çoğunlukla çağrışım yapan ya da bilgiyi hatırlatan sorular olarak ortaya çıkmaktadır (Kılıç, 2016).

Bloom Taksonomisi'nin düzeyleri doğrultusunda etkili soru sorulabilmesi çocukların derin düşünmesini belirlemede önemli bir etken olmaktadır (Seeger, Wood ve Romans, 2018). Bloom Taksonomisi, 1956 yılında Benjamin Bloom ve arkadaşları tarafından, ders materyallerinin ve test sonuçlarının değerlendirilmesi ve eğitim hedeflerinin sınıflandırılması amacıyla geliştirilmiştir (Radmehr ve Drake, 2017). Eğitimin hedeflerinin yapısındaki değişimler ve bilişsel psikolojideki gelişmeler Bloom Taksonomisi'nin değişmesini gerekli kılmış ve 2001 yılında Anderson ve Krathwohl'un öncülüğünde oluşturulan çalışma grubu tarafından Bloom Taksonomisi güncellenmiştir (Anderson, 2005). Güncellenmiş Bloom Taksonomisi (GBT) bilgi ve bilişsel süreç boyutu olmak üzere iki boyuttan oluşmaktadır. Bilişsel süreç boyutu, hatırlama, anlama, uygulama, çözümlenme, değerlendirme ve yaratma kategorilerini içermekte ve bu kategoriler alt düzey düşünme becerilerinden (hatırlama), üst düzey düşünme becerilerine (yaratma) doğru bir hiyerarşi yansıtmaktadır (Magas, Gruppen, Barrett, Dedhia ve Sandhu, 2017). GBT'nin her kategorisinin altında alt kategoriler yer almaktadır. Bilişsel süreç boyutunda toplam 19 alt kategori bulunmaktadır. GBT'nin bilişsel süreç boyutu genellikle alt ve üst düzey olarak; bazen de alt, orta ve üst düzey olarak sınıflandırılmaktadır (McMillan, 2015). Benzer şekilde, Moodley (2013)'in çalışmasında da, GBT alt, orta ve üst bilişsel düzey olmak üzere üç düzeye ayrılmış, hatırlama alt bilişsel düzey; anlama ve uygulama orta bilişsel düzey ve çözümlenme, değerlendirme ve yaratma basamakları ise üst bilişsel düzey olarak değerlendirilmiştir.

Felsefe bir soru sorma etkinliğidir (Topdemir, 2009). Sorusuz felsefe ve felsefe eğitimi temelden yoksun bir etkinlik olacaktır. (Taşdelen, 2007). Farklı ülkelerde lise düzeyinde felsefe öğretimi ve felsefe dersinde uygulanan etkinlikler çoğunlukla ders kitabı doğrultusunda sürdürülmektedir (Choi, 2002; Pinto, Boyd ve McDonough, 2009; Pinto, McDonough ve Boyd, 2011). Öğretim yöntemlerinde ve teknolojilerinde, öğrenmeyi destekleyici pek çok gelişme olmasına rağmen ders kitapları halen temel öğretim kaynakları olarak kullanılmaktadır (Höttecke ve Silva, 2011) Ergün ve Yapıcı (2006)'nın araştırmasında da Türkiye'de lisede felsefe derslerinin MEB tarafından hazırlanan ders kitabı doğrultusunda işlendiği bulgulanmıştır. Bu nedenle felsefe dersinin, öğrencilerin üst düzey düşünme becerilerini harekete geçirmesinde, felsefe ders kitabında yer alan sorular önem taşımaktadır.

Bu araştırmanın amacı felsefe öğretiminde kullanılan soruların üst düzey düşünme becerileri açısından incelenmesidir. Bu amaca ulaşmak için şu sorulara yanıt aranmıştır:

(1) 11. Sınıf Felsefe Ders Kitabında yer alan soruların özellikleri nelerdir?

(2) 11. Sınıf Felsefe Ders Kitabındaki soruların GBT'nin bilişsel süreç boyutuna göre dağılım oranı nedir?

(3) 11. Sınıf Felsefe Ders Kitabı'nda yer alan sorularda üst düzey düşünme becerilerine yer verme oranı nedir?

Araştırma, doküman analizi doğrultusunda yapılmıştır. Araştırmada incelenen doküman 2018 Felsefe Öğretim Programı doğrultusunda hazırlanan MEB tarafından yayımlanan Ortaöğretim Felsefe 11. sınıf Ders Kitabı'nda yer alan sorulardır. Araştırmanın birinci alt amacının çözümlenmesinde frekans ve yüzde kullanılmıştır. İkinci alt amacın çözümlenmesi 2001 yılında Güncellenmiş Bloom Taksonomisi'nin bilişsel süreç boyutu doğrultusunda yapılmıştır. Üçüncü alt amacın çözümlenmesinde Moodley (2013)'in yaptığı sınıflama kullanılmıştır. Kitapta yer alan soruların analizinde kullanmaya yönelik Anderson (2005), Anderson ve diğerleri (2010), Krathwohl (2002), ve Turgut ve Baykul (2015)'dan yararlanılarak bir Analiz Tablosu hazırlanmış ve Ek 1'de (bu başlığın altında) sunulmuştur. Analiz Tablosunda taksonomide yer alan kategorilere yönelik tanımlamalara, örneklere, alternatif isimlendirmelere, kategoriler arası ilişkilere ve farklara yer verilmiştir. Soruların kodlanmasında kullanılacak kriterler belirlenmiştir. Bu kriterler şunlardır: (i) Sorular kodlanırken taksonominin iki basamağı arasında kaldığında (örneğin, anlama ve analiz) Anderson (2005)'in önerdiği gibi soru, yüksek olan kategoriye (analiz) kodlanacaktır. (ii) Sorularda istenen yanıtın kitabın önceki bölümlerinde verilip verilmediği kontrol edilecektir. Yanıtı kitabın önceki bölümlerinde yer alan sorular 'hatırlama' olarak kodlanacaktır. Kodlamalarda Analiz Tablosu yanında, sorulara verilebilecek yanıtlar da göz önünde bulunduralar çözümlenmeler yapılmıştır.

Araştırma sonucunda, kitabın tüm ünitelerinde aynı sistematiklik içerisinde hazırlık, uygulama, tartışma, metin analizi, yazma ve ölçme ve değerlendirme sorularına yer verildiği görülmüştür. Kitapta en çok tekrarlanan amaca yönelik soru türleri sırasıyla uygulamaya yönelik sorular, metin analizine yönelik sorular ve tartışmaya yönelik sorular olmuştur. Kitap içerisinde toplam değerlendirme yanında biçimlendirici değerlendirmeye de önem verilmiştir. Kitapta sorulara sıklıkla yer verilmiştir. Değerlendirme sıklığı öğrencinin akademik başarısını arttırmada önemli bir unsurdur. Ayrıca sorular yoluyla öğrencinin öğrenmesinin ve düşünmesinin değerlendirilmesi yapılabilmektedir (Marzano, 2006). Kitapta sorulara sıklıkla yer verilmesi öğreneni sorgulamaya, düşünmeye sevk etmesi ve akademik başarısını arttırması açısından önem taşımaktadır.

Kitaptaki soruların yüzde 22,5'i hatırlama basamağında bulunmaktadır. Kitapta yer alan yaklaşık 10 sorudan yedisi ise taksonominin anlama basamağında yer almaktadır. Ancak soruların çoğunluğunun bu basamakta olması öğrencilerin üst düzey düşünme becerilerinin gelişimine katkı sağlamaktan ziyade engel teşkil eder düzeydedir. Kitapta uygulamaya (%1,7), çözümlenmeye (%2,4), değerlendirmeye (%1,4) ve yaratmaya (%2,4) yönelik çok az sayıda soruya yer verilmiştir. Cevizci (1997)'ye göre felsefe uygulamaya yönelik değil, düşünmeye yönelik bir disiplindir. Bu nedenle kitapta uygulama düzeyine ilişkin soruların az olması dersin özelliğinin bir sonucu olarak değerlendirilebilir. Bununla birlikte felsefi düşünce analiz ve sentez etmeyi gerektiren bir düşüncedir (Cevizci, 1997). Felsefe kitabında yer alan sorularda bu ilkenin dikkate alınmadığı görülmektedir. Felsefe, doğası gereği sorgulamayı, derinlemesine ve kapsayıcı düşünmeyi yöntem olarak kullanan bir disiplindir. Bu becerilerin kullanılmasını aktif kılacak, özellikle çözümlenme ve değerlendirme basamaklarında soruların yazılması önerilebilir.

Kitaptaki soruların büyük bölümü orta bilişsel düzeye yönelik hazırlanmıştır. Bu soruları alt düzey sorular izlemektedir. Soruların yalnızca yüzde 6,1'i üst bilişsel düzeye yönelik hazırlanmış olup, bu oran oldukça düşük kalmaktadır. Bu sonuç soruların bir taksonomi ya da sıralamaya dayalı olarak hazırlanmadığını göstermektedir.

Derslerde üst bilişsel düzeye yönelik sorular sorulması öğrencilerin akademik başarılarını arttıran bir unsurdur (Cimer, 2007). 2018 Felsefe Öğretim Programı'nda amaçlanan, öğrencilerin eleştirel düşünme, yaratıcılık, analitik düşünme, özgün fikirler üretme, felsefi okuryazarlık, ifade ve yazma becerisi gibi yeterliklerinin geliştirilmesine yönelik orta bilişsel düzeye yönelik soru sayısının azaltılıp, üst bilişsel düzeye yönelik soru sayısının artırılması önerilebilir. Üst düzey düşünme becerilerine yönelik felsefe sorularına örnek olması açısından analiz düzeyinde “Verilen Sözler Tutulmalıdır”, değerlendirme düzeyinde “Enigma” ve yaratma düzeyinde “İhtiyaç mı, istek mi” başlıklı sorular yazılarak sunulmuştur.

## EK 1. Analiz Tablosu

Bilişsel süreç grupları	Alternatif isimler	Tanımlar, Örnekler, İlişkiler ve Farklar
<b>1. HATIRLAMA</b>		<b>Uzun süreli bellekte ilişkili bilgiye erişilmesi</b> -Öğrenciden istenen, koşullarda hiçbir değişiklik yapmadan ya da çok az değişiklikle görevi yerine getirmesidir.
<b>1.1 Tanıma</b>	Belirleme	* Ulus tarihindeki önemli olayların tarihlerini tanıma.
<b>1.2 Hatırlama</b>	Bilgiye erişme	* Ulus tarihindeki önemli olayların tarihlerini hatırlama.
<b>2. ANLAMA</b>		<b>Sözlü, yazılı veya grafik biçimlerde olabilen öğretimle ilgili iletilerden anlam oluşturma</b> - Öğrenciler, edindikleri yeni bilgiler ile daha önce edinmiş oldukları bilgiler arasında bağlar oluşturduklarında anlama düzeyine erişirler.
<b>2.1 Yorumlama</b>	Açıklık getirme, Başka bir ifade ile anlatma, Çevirme, Temsil etme	- Önemli konuşma ve dokümanları değişik bir ifadeyle söyleme. * İnsan Hakları Evrensel Bildirgesi gibi çok iyi bilinen bir dokümanı öğrencinin kendi ifadesi ile sunması.
<b>2.2 Örneklendirme</b>	Gösterimleme, Somutlama	- Kavram veya ilkeyi örneklendirmek, belirtmek için özel bir örnek veya gösterimleme yolu bulma. * Çeşitli yağlıboya resim stillerine örnekler verme.
<b>2.3 Sınıflama</b>	Gruplara ayırma, İlgili gruba yerleştirme	* Gözlenen veya betimlenen ruh hastalıklarını sınıflama. * Öğrenciden zihinsel rahatsızlığı olan bir kişinin videoya kaydedilmiş davranışlarını gözleyerek bu görüntülerde yansıyan zihinsel sorunu belirlemesini isteme.
<b>2.4 Özetleme</b>	Kısaca ifade etme, Genelleme	* Doğa bilimlerinde tanınmış bilim adamlarının birkaç yazısını okuduktan sonra onların önemli katkılarını özetleme. * Yazıya uygun başlık belirleme.
<b>2.5 Sonuç çıkarma</b>	Çıcarsama, Ulama, Öteleme, Önceden tahmin etme, Yordama	- Bir dizi örnek ya da durumdan kendini gösteren örüntüyü (tekrarlanan gidiş, sıralanış) bulma. * Yabancı dil öğrenirken dilin kurallarını örneklerinden çıkarma. <b>Sonuç çıkarma ve irdeleme arasındaki fark:</b> İrdelemede sadece yazarın bakış açısı belirlenir. Sonuç çıkarmada ise sunulan bilgiden yararlanarak bu bilgide kendini gösteren örüntü ortaya çıkarılır.
<b>2.6 Karşılaştırma</b>	Benzerlik veya fark arama, Eşleme, Örtme, Farkları ortaya koyma	- İki düşünce, nesne ve benzeri arasındaki benzerlikleri ve farklılıkları bulma. * Elektrik devresi hangi açıdan suyun borudan akışına benzer?
<b>2.7 Açıklama</b>	Modeller oluşturma	- Öğrenci bir sistemdeki neden-sonuç ilişkileri ile ilgili modeli yapabilir ve bundan yararlanabilir hale geldiğinde açıklama gerçekleşmiş olur. * 18. Yüzyılın önemli olaylarının nedenlerini açıklama. *Bir bisiklet lastiği pompasındaki silindirin çapı arttırılırsa ne olur?
<b>3. UYGULAMA</b>		<b>Verilen bir durumda bir işlem yolunu izleme veya ondan yararlanma anlamındadır.</b>
<b>3.1 Yapma</b>	İcra etme, Gerçekleştirme	- İşlemi, bilinen bir göreve uygulama. * Çok basamaklı bir tamsayıyı başka bir, çok basamaklı tam sayıya bölme.
<b>3.2 Yararlanma</b>	Kullanma	- Uygun olduğu yeni bir durumda işlemde yararlanma. * Newton'un 2. yasasının hangi durumlarda geçerli olduğunu belirleme. <b>Diğer kategorilerle ilişkisi:</b> Yararlanma anlama ve yaratma gibi diğer bilişsel süreç kategorileri ile ilişkili olarak kullanılmaktadır.

Bilişsel süreç grupları	Alternatif isimler	Tanımlar, Örnekler, İlişkiler ve Farklar
4. ÇÖZÜMLEME		<p><b>Materyali onu oluşturan parçalara ayırma ve parçaların birbiri ve materyalin bütünü ile ilişkilerini belirleme.</b></p> <p>- Bir ürünü analiz etme süreci, ürünü oluşturan öğelerin neler olduğunu (ayırma), bu öğelerin arasındaki ilişkileri veya öğelerin nasıl organize edildiğini (organize etme) ve ürünün nasıl oluşturulduğunu ortaya çıkarma basamaklarını içerir.</p> <p><b>Diğer kategorilerle ilişkisi:</b> Analiz basamağı anlama ile değerlendirme arasında bir zihinsel süreçtir.</p>
4.1 Ayırıştırma	Ayırt etme, Ayırma, Büyüteç altına alma, Seçme, Üzerinde durma	<p>- Sunulan materyalin ilişkili ve ilişkisiz ya da önemli ve önemsiz kısımlarını birbirinden ayırt etme.</p> <p>* Araştırma raporlarındaki başlıca noktaları belirlemeyi öğrenme.</p> <p>* Bir şeyin nasıl çalıştığını anlatan bir yazıda ana basamakların seçilmesi. Bununla ilgili değerlendirme maddesinde öğrenciden, kitaptan yıldırım oluşumunu anlatan bir bölümü okuması ve sonra da bu süreci (nemli havanın yükselerek bir bulut oluşturmaya, bulut içerisinde yukarıya doğru ve aşağıya doğru hava hareketlerinin oluşması, bulut içindeki yüklü damlacıkların ayrılması, öncünün buluttan yere doğru hareket etmesi ve yerden buluta doğru dönme şokunun oluşması şeklinde) ana basamaklara bölmesi istenebilir.</p> <p><b>Diğer kategorilerden farkı:</b> Ayırıştırma, anlama ile ilgili bilişsel süreçlerden farklıdır; çünkü o yapısal organizasyonla ve özellikle parçaların genel yapı ya da bütün ile nasıl bir uyum içinde olduğunun belirlenmesi ile ilgilidir. Ayırıştırma, parçaların bütünüle ilişkisi esastır. Anlamada, ürünün kendisini bir bütün olarak anlama vardır. Karşılaştırmadan ayrılır. Örneğin elmaları ve portakalları meyve bağlamında ayırırken iç çekirdekler ilişkili, fakat renk ve biçim ilişkisizdir. Karşılaştırma yaparken çekirdek, renk ve şeklin hepsi ilişkilidir.</p>
4.2 Örgütleme	Bütünlüğü ve bütünleştirmeyi görme, Ana çizgileri belirleme, Özdeşleştirme, Yapılandırma, Tutarlılık sağlama	<p>- Örgütlemeye, bir durum veya problem anlatıldığında öğrencinin ilgili öğeler arasında sistemli ve bütünlük sağlayıcı ilişkileri belirleyebilmesi söz konusudur.</p> <p>- Örgütlemeye materyale ana hat, tablo, matris, hiyerarşik şema gibi bir yapı kazandırılması söz konusudur.</p> <p>* Araştırma raporlarını hipotez, yöntem, veriler ve sonuçlardan oluşan dört bölüm halinde çözümlemeyi öğrenme şeklinde olabilir. Öğrencilerden kendilerine sunulan raporun ana hatlarını çıkarmaları istenebilir.</p>
4.3 İrdeleme	Atfetme, Yükleme	<p>- Öğrenci iletişimin temelindeki bakış açısını, yanlışlıkları ve değerleri meydana çıkarabildiği zaman gerçekleşmiş olur. İrdeleme, öğrencinin yapılandırma sürecini yapıyı bozma yönünde işleterek kendisine sunulan materyalde yazarın niyetlerini belirlemesini içerir.</p> <p>* İnsan öğrenmesi ile ilgili bir raporun davranışçı bir psikolog tarafından mı yoksa bir bilişsel psikolog tarafından mı yazıldığını sormak.</p> <p>* Yazarın, okuduğunuz bu Amazon Yağmur Ormanları ile ilgili yazıyı yazmaktaki amacı aşağıdakilerden hangisidir?</p> <p>a) Amazon Yağmur Ormanları ile ilgili olgusal bilgi sunmak</p> <p>b) Okuyucuyu yağmur ormanlarının korunması gerektiği konusunda uyarmak</p> <p>c) Yağmur ormanları oluşturmanın ekonomik avantajını göstermek</p> <p>d) Yağmur ormanı geliştirmenin insanlar için sağlayacağı yararları belirtmek</p> <p><b>Diğer kategorilerden farkı:</b> Öğrencinin kendisine sunulan materyali anlamaya, kavramaya çalıştığı yorumlamadan farklı olarak irdelemeye sunulan materyale yansıyan şekliyle yazarın niyetini ya da bakış açısını belirlemek amacıyla temel anlama ve kavramanın ilerisine geçmeyi kapsar (Anderson ve diğerleri, 2010, s.107).</p>

Bilişsel süreç grupları	Alternatif isimler	Tanımlar, Örnekler, İlişkiler ve Farklar
<b>5. DEĞERLENDİRME</b>		<p><b>Ölçütler ve standartlara dayalı yargılara ulaşma.</b></p> <ul style="list-style-type: none"> <li>- Öğrencilerden değerlendirmede kullanacakları ölçütleri kendilerinin oluşturması da istenebilir.</li> <li>* Bu makine beklenen etkililikte çalışıyor mu?</li> <li>* Amacı gerçekleştirmek için en iyi yol bu yöntem midir?</li> <li>* Bu yaklaşım ötekilere göre daha ekonomik midir?</li> </ul> <p><b>Diğer kategorilerden farkı:</b> Değerlendirmeyi öğrencilerin yaptığı diğer yargılamalardan en iyi şekilde ayıran şey değerlendirmede, açıkça belirlenmiş ölçütlere dayalı performans standartlarının yararlanılmakta olmasıdır.</p>
<b>5.1 Denetleme</b>	Eşgüdümleme, İzleme, Test etme, Sınama, Bulma, İç tutarlılık açısından kontrol etme	<ul style="list-style-type: none"> <li>- Bir süreç veya ürünün uyumsuzlukları belirleme; ürün veya süreçte iç tutarlılık olup olmadığını ortaya çıkarma; bir işlem kullanıldığında onun ne kadar etkili bir süreç oluşturacağını görebilme.</li> <li>* Kimya deneyi ile ilgili bir raporu okuması ve bu raporda ulaşılan sonucun deneyden elde edilen gözlemlerden hareketle ulaşılabilecek bir sonuç olup olmadığını belirlemesi istenir.</li> </ul>
<b>5.2 Eşleştirme</b>	Yargılama	<ul style="list-style-type: none"> <li>- Bir ürünün ilgili <b>dış ölçütlerle</b> uyumsuzluğunu ortaya çıkarma, ürünün dış ölçütlere uygunluğunu belirleme, bir işlemin verilen problem için uygunluğunu ortaya koyma.</li> <li>* İki yöntemden hangisinin, verilen problemi çözmek için en uygun olduğunu ortaya koyma.</li> <li>* Anaokulundan 12. sınıfa kadar olan eğitimin nasıl geliştirilebileceği” şeklinde bir problemin çözümü için önerilen “öğrencilere not verme işine son verme” şeklinde bir çözümü olası etkililiği açısından değerlendirme.</li> </ul>
<b>6. YARATMA</b>		<p><b>Öğeleri uygun şekilde bir araya getirerek, yeni, özgün bir ürün oluşturma.</b></p> <p><b>Diğer kategorilerden farkı:</b> Kompozisyon yazmanın her zaman değil ama sık sık yaratma ile ilgili bilişsel süreçleri gerektirdiğini kabul ediyoruz. Örneğin, düşüncelerin hatırlanmasını ya da materyallerin yorumlanmasını temsil eden yazı yazma girişimlerinde yaratmaya yer yoktur.</p>
<b>6.1 Oluşturma</b>	Hipotez önerme	<ul style="list-style-type: none"> <li>- Ölçütlerden hareketle yeni hipotezler oluşturma.</li> <li>* Herkesin yeterli sağlık sigortasına sahip olmasını güvence altına almak için öğrenciden düşünebildiği kadar çok yol önermesi istenebilir.</li> <li>* Birbiri ile çarpıldığında 60 çarpımını verecek tamsayıları belirlemek için hangi alternatif yöntemleri kullanabilirsin?”</li> </ul> <p><b>Diğer kategorilerden farkı:</b> Oluşturma, burada sınırlı bir anlamda kullanılmıştır. Anlama da çevirme, örneklendirme, özetleme, sonuç çıkarma, sınıflama, karşılaştırma ve açıklama kapsamında sözünü ettiğimiz oluşturma türünden süreçleri gerektirir. Ancak, kavramın amacı genellikle kapalı uçludur, yani tek bir anlama erişme şeklindedir. Bunlardan farklı olarak yaratma içindeki oluşturmada amaç açık uçludur, yani çeşitli olasılıklara erişme şeklindedir.</p>
<b>6.2 Planlama</b>	Tasarlama, Düzenleme	<ul style="list-style-type: none"> <li>* Kadına yönelik şiddetin nedenleri ile ilgili bir araştırma raporu yazımına geçmeden önce, öğrenciden bu araştırmayı yaparken atacağı adımları içeren ana hatları belirleyerek sunması istenebilir.</li> </ul>
<b>6.3 Üretme</b>	Yapma, Yapılandırma	<ul style="list-style-type: none"> <li>* Belli canlı türleri için, belli amaçlara uygun olacak yaşam birlikleri oluşturma.</li> <li>* Ürünler icat etme.</li> </ul>