

# A Revised Bloom's Taxonomy-Based Analysis of Lower Secondary Education English Teaching Curriculum

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## Abstract

This study evaluated the learning outcomes in lower secondary education English Curriculum regarding knowledge and cognitive processes in the Revised Bloom Taxonomy. Document analysis, a qualitative research method, was employed in data analysis. Two hundred forty-five learning outcomes were analyzed: 52 in Grade 5, 60 in Grade 6, 63 in Grade 7, and 70 in Grade 8. The findings revealed that most of the outcomes in lower secondary education English curriculum were at the "conceptual knowledge" dimension according to the Revised Bloom Taxonomy. In addition, most outcomes were at the "applying" level in the conceptual knowledge dimension. The study's results suggested that knowledge and cognitive processes were not equally distributed in English courses. It was found that the learning outcomes were mainly concentrated on the applying level in the 5th, 6th, and 7th grades. In contrast, in the 8th-grade outcomes, there was an increase in the higher-order thinking stages, and the results for the analysis and creating levels were included for the first time. However, it was observed that there was no increase in the cognitive process dimensions of the outcomes from the 5th Grade to the 7th Grade. Therefore, attention should be paid to the distribution of the outcomes in the curriculum, considering the students' developmental levels.

**Keywords:** Lower secondary education English teaching curriculum, Revised Bloom's Taxonomy, Document analysis

## Ortaokul İngilizce Dersi Öğretim Programının Yenilenmiş Bloom Taksonomisi 'ne Göre Analizi

### Öz

Bu çalışmada, ortaokul İngilizce dersi öğretim programında bulunan kazanımları Yenilenmiş Bloom taksonomisinin bilgi ve bilişsel süreç boyutu açısından değerlendirilmesi amaçlanmıştır. Verilerin analizinde nitel araştırma yöntemlerinden biri olan doküman analizi kullanılmıştır. Çalışmada 5. sınıfta 52 kazanım, 6. sınıfta 60 kazanım, 7. sınıfta 63 kazanım ve 8. sınıfta 70 kazanım olmak üzere toplam 245 kazanım analiz edilmiştir. Araştırmanın sonucunda İngilizce dersi 5. 6. 7. ve 8. sınıflara ait kazanımlara bakıldığında, Yenilenmiş Bloom Taksonomisinin "bilgi birikimi" boyutuna göre kazanımların çoğunluğunun "kavramsal bilgi" boyutunda yer aldığı görülmektedir. Kazanımlar "bilişsel süreç" boyutu açısından incelendiğinde ise en yoğun basamağın "uygulama" olduğu belirlenmiştir. Sonuçlar değerlendirildiğinde İngilizce öğretim programında bilgi ve bilişsel süreç boyutunda yapılan sınıflandırmaların dengeli yer almamaktadır. 5. 6. ve 7. sınıf düzeylerinde kazanımların ağırlıklı olarak uygulama basamağında yoğunlaştığı; 8. sınıf kazanımlarında ise üst düzey düşünme basamaklarında artma olduğu, analiz ve yaratma basamağına yönelik kazanımların yer almaya başladığı görülmektedir. Ancak İngilizce öğretim programında 5. sınıftan başlayarak 7. sınıfa kadar kazanımların bilişsel süreç boyutlarında basamaklar arasında artma olmadığı görülmektedir. Bu nedenle öğrencilerin gelişim düzeyleri dikkate alınarak öğretim programındaki kazanımların dağılımına dikkat edilmesi gerektiği söylenebilir.

**Anahtar kelimeler:** Ortaokul İngilizce dersi öğretim programı, Yenilenmiş Bloom Taksonomisi, doküman analizi

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## INTRODUCTION

With the development of communication systems introduced by the global technological revolution, the English language has become universal. As a result, it has become necessary to include the English language in the education system from the early years of education to the final years of university (Kırkıç & Boray, 2017). Turkey has been ongoing efforts for years to create an efficient English education to keep up with the pace of modern ages (Hamurcu & Ekinci, 2020).

Due to the necessity of learning English, there have recently been frequent revisions in English teaching curriculums in Turkey (Seçkin, 2011). The primary school English curriculum published in 2006 was found insufficient regarding flexibility and recommended time (Yücel et al., 2017). Consequently, a new teaching program was designed for the 2013-2014 school year, and as of this date, English was integrated into the program starting from Grade 2 (MEB, 2013). In 2018, some revisions were made to the lower secondary education English teaching curriculum by decreasing the workload and underlining education values (Aslan et al., 2019).

The common purpose of the constantly updated and prepared English teaching programs is to ensure the fluency and permanence of the language and to be applied in daily life (MEB, 2013; MEB, 2018). Curriculums published in 2006, 2013, and 2018 also included world events in English teaching, thus serving as teacher guides (Akyol, 2021; Yücel et al., 2017). The English teaching curriculum, designed in 2018 for secondary school students, aims to create motivation for English learning through effective communication over the English language (Acar, 2019).

Learning outcomes ensure that curricula are delivered to the students within a particular objective and organization (Gezer et al., 2014). When learning outcomes comply with the learning objective, it is possible to have an efficient practice for the teaching-learning process and measurement and evaluation activities (Coşkun Diker, 2017). Thus, learning outcomes for the English teaching curriculum include advanced thinking skills and a focus on acquiring four basic language skills for more efficient use of the language (MEB, 2018).

Tekin (2009) and Gezer et al. (2014) stated that some educators suggested a restriction on educational targets due to the need for a clear reflection of the change in students' attitudes and that outcomes are being interpreted the same by the language operators. In line with this objective, the studies were carried out by Bloom, Englehart, Furst, Hill, and Krathwohl. (1956) have been widely accepted (Gezer et al., 2014). Bloom's classification aims to make cognitive learning easy for students and thus boost learning levels (Anderson & Krathwohl, 2001).

An overall analysis of the original Bloom's Taxonomy suggests a structure of three stages: cognitive, affective, and psychomotor. The cognitive field focuses on students' intellectual development, affective emotions, and psychomotor physical skills (Chandio et al., 2021). Bloom concentrates his studies mainly on the cognitive field. He defines the cognitive dimension in six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation (Lasley, 2014). Bloom's Taxonomy suggests that teaching and evaluation processes should switch from lower to higher levels of learning. In this taxonomy, 'knowledge,' 'comprehension,' and 'application' account for lower learning levels, whereas analysis, synthesis, and evaluation account for higher levels (Chandio et al., 2021). In other words, learning takes place from the lowest level to the highest one, which suggests progress from simple to complex, concrete to abstract, easy to hard (Tuğrul, 2002). Moreover, a student has to fully comprehend previous levels or levels before moving onto a higher level (Hamurcu & Ekinci, 2020).

In the 1990s, Lorin Anderson, a student of Bloom, decided to revise the taxonomy for 21st-century students and teachers by considering modern needs (Forehand, 2010). Some revision requirements included changes in learning and teaching outcomes, doubts about the order of evaluation steps, and insufficiency in explaining the learning process (Birgin, 2016).

In Bloom's original taxonomy, the six steps of cognitive dimension were changed from nouns to verbs: knowledge was changed to remembering, comprehension to understanding, and synthesis to creating (Forehand, 2005). Besides, the Revised Bloom's Taxonomy (RBT) also suggests a change in the order of synthesis and evaluation (Ari, 2011). Another change in Bloom's Taxonomy considers cognitive areas from two perspectives: knowledge and cognitive process (Yurdabakan, 2012).

This section should define the background to research, significance and research problem(s). While writing your manuscript, please regard APA 7, format-free article template, and keep your name anonymous throughout the manuscript. You may change the titles in the manuscript. Please use this style when you are writing text in the body of your manuscript. Arrange your tables as shown below:

**Table 1.** Sample Table Title

Knowledge Dimension	Cognitive process					
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Factual	A1	A2	A3	A4	A5	A6
Conceptual	B1	B2	B3	B4	B5	B6
Procedural	C1	C2	C3	C4	C5	C6
Metacognitive	D1	D2	D3	D4	D5	D6
*A1: Remembering-Factual	*B1: Remembering-Conceptual	*C1: Remembering- Procedural	*D1: Remembering – Metacognitive			
*A2: Understanding-Factual	*B2: Understanding-Conceptual	*C2: Understanding- Procedural	*D2: Understanding - Metacognitive			
*A3: Applying-Factual	*B3: Applying-Conceptual	*C3: Applying- Procedural	*D3: Applying- Metacognitive			
*A4: Analyzing – Factual	*B4: Analyzing –Conceptual	*C4: Analyzing – Procedural	*D4: Analyzing - Metacognitive			
*A5: Evaluating – Factual	*B5: Evaluating –Conceptual	*C5: Evaluating – Procedural	*D5: Evaluating - Metacognitive			
*A6: Creating – Factual	*B6: Creating –Conceptual	*C6: Creating – Procedural	*D6: Creating – Metacognitive			

Table 1 illustrates that the knowledge dimension includes factual, conceptual, procedural, and metacognitive levels, whereas cognitive processes include remembering, understanding, applying, analyzing, evaluating, and creating. A pre-revised version of the taxonomy includes factual, conceptual, and procedural knowledge, and a metacognitive level was added later on (Wilson, 2016; Yurdabakan, 2012).

The factual dimension contains basic information that students should know. Conceptual knowledge is the classification, generalization, and principles involving more complex and organized information. Procedural knowledge includes knowing how to do something, such as algorithms, methods, and techniques. Metacognitive knowledge was added to the knowledge dimension as the revised taxonomy brings new perspectives to students' cognitive processes. This dimension refers to a knowledge in which the person is aware of the thinking processes. It enables students to know what they are doing and how to use the acquired skills in various situations (Krathwohl, 2002; Wilson, 2016; Tayyeh et al., 2021; Tutkun, 2012).

Remembering, the first step of the cognitive process, indicates identifying or remembering information in memory. The second step, understanding, refers to explaining, interpreting, sampling, summarizing, and classifying messages in written or visual texts. Applying denotes applying and using information in similar situations. Analyzing means breaking down information in order to research, understand, and relate to each other. Evaluating refers to being able to criticize information, make suggestions and judgments. Creating is the original arrangement, assembly, and re-creation of elements. It is the most difficult and complex level in which a new form is created by synthesizing the parts (Krathwohl, 2002; Wilson, 2016).

Bloom's Taxonomy classifies outcomes as cognitive, affective and psycho-motor. (Doğanay & Sari, 2007). Cognitive domain refers to cognitive processes such as knowing, remembering, understanding and evaluating in program development and implementation. Cognitive outcomes are related to the learning process of the information in the mind and its use in daily life (Özdemir, 2014). Since the lower secondary school English curriculum is mainly verbal and language based, most of the outcomes are related to the cognitive domain. Cognitive learning has mainly mental outcomes and covers a series of hierarchical stages, starting with remembering and ending with creativity (Akpınar, 2017). Besides cognitive outcomes, there are also affective and psychomotor learning outcomes. The affective domain emphasizes feelings such as willingness, motivation, attitude, interest, willingness, like, or dislike. (Demirel, 2013). The psychomotor domain is related to mind-muscle coordination. (Senemoğlu, 2009). The statements above revealed that the lower secondary school English Curriculum outcomes were related to the cognitive domain.

A literature analysis shows that there needs to be more research on the learning outcomes for the English Curriculums. However, there is a sufficient amount of analysis on the compliance of English exam questions (Dalak, 2015; Gökdeniz & Demirci, 2020, Gökler, Aypay & Arı, 2012) to the national assessment and English curriculum objectives (Kozikoğlu, 2018), based on Revised Bloom's Taxonomy (Hamurcu & Ekinci, 2020). This study aimed to analyze the learning outcomes for the English curriculum designed for Grades 5, 6, 7, and 8 in terms of cognitive process and knowledge dimension in the Revised Bloom's Taxonomy. For this purpose, answers to the following questions were sought:

### The Aim of the Study

This study evaluated the learning outcomes in lower secondary education English Curriculum regarding knowledge and cognitive processes in the Revised Bloom Taxonomy.

### Research Questions

1. What is the distribution of the 5th-grade English curriculum outcomes according to RBT's cognitive process and knowledge dimension?
2. What is the 6th grade English curriculum outcomes distribution according to RBT's cognitive process and knowledge dimension?
3. What is the distribution of the 7th grade English curriculum outcomes according to the cognitive process and knowledge dimension of RBT
4. What is the distribution of the 8th grade English curriculum outcomes according to RBT's cognitive process and knowledge dimension?
5. What is the general distribution of the learning outcomes for lower secondary English curriculum regarding RBT?

## METHOD

In this study, document analysis, one of the qualitative research methods, was adopted to examine lower secondary school English curriculum based on cognitive process and knowledge dimension in Revised Bloom Taxonomy. Document analysis includes a thorough examination of the written texts on the events and phenomena relevant to the research topic (Yıldırım & Şimşek, 2018). Document analysis also investigates the characteristics of a particular text or document with numerical expression and content analysis (Karasar, 2008) so that results can be reported once the data is categorized (Merriam, 2013). As the data source, cognitive outcomes in the English Teaching Curriculum for Grades 5,6,7,8 designed by the Board of Education in the Ministry of Education in 2018, which public schools still use.

This study included a three-stage analysis of the lower secondary education English teaching curriculum based on Revised Bloom's Taxonomy. The first stage consisted of a classification of all the learning outcomes based on RBT. (A total of 245 outcomes, 52 in 5th Grade, 60 in 6th Grade, 63 in 7th Grade, and 70 in 8<sup>th</sup> Grade, were analyzed). In stage two, three experts on curriculum development and two from English language teaching were asked for expert opinions. These experts analyzed the data independently. In the final stage, all experts were brought together to check the cognitive process and analysis of the knowledge dimension. As a result, a consensus was reached on the majority of outcomes. The experts could not reach a consensus on three of the 52 learning outcomes of the 5th Grade (*E5.5.L1. Students will be able to identify common illnesses and understand some of the suggestions made, E5.7.S3. Students will be able to use utterances to express obligation, E5.8.S2. Students will be able to accept or refuse suggestions simply*), two of the 60 outcomes of the 6th Grade (*E6.2.S2. Students can express their opinions about the food they like and do not like, E6.10.R1. Students will be able to recognize familiar words and simple phrases related to the concept of democracy*), two of the 63 outcomes of the 7th Grade (*E7.6.S2. Students will be able to express needs and quantity, E7.8.S2. Students will be able to report on explanations with reasons*), and four of the 70 outcomes of the 8th grades (*E8.1.W1. Students can write a short and simple letter apologizing and giving reasons for not attending a party in response to an invitation. E8.3.L1. Students will be able to get the gist of short, clear, simple descriptions of a process, E8.8.W1. Students can write short and simple poems/stories about their feelings and responsibilities, E8.10.SI4. Students will be able to give reasons and results to support their predictions about natural forces and disasters*). It was decided by a majority of votes in which domain these outcomes should be.

Later on, the experts expressed their opinions on the dimensions that should be included in Table 1 so that the outcomes for the cognitive process and knowledge dimensions could be determined, and the dimensions with the consensus were selected. Without consensus, the expert with a different opinion was asked to explain his/her reasons. The experts continued to work on the outcomes until they had a consensus. If no consensus was possible, the dimensions at least three of the five experts agreed on were accepted as the cognitive process and knowledge dimensions. In addition, some outcomes were discussed holistically. Thus, the analysis results based on the taxonomy classification were evaluated using a holistic approach. The meanings expressed in the outcomes were taken into consideration. For instance, the outcome stating that "E5.1.L1. Students will be able to understand

simple personal information” was included in A2, whereas “E5.2.S1. Students will be able to talk about the location of things and people in simple conversations” was included in B3.

In order to ensure the validity and reliability of the data, the codes used by the researchers and three experts were compared so that the data could be finalized.

**Research Ethics**

The approval of the Firat University Social and Human Sciences Research Ethics Committee was obtained for ethical compliance with the research procedures.

**FINDINGS**

This section includes an RBT-based evaluation of cognitive outcomes in the English Curriculum for Grades 5, 6, 7, and 8. Table 2 illustrates the frequency distribution of the learning outcomes in the English Curriculum for Grade 5 based on knowledge and cognitive process dimensions.

**Table 2.** Distribution of the Outcomes in English Curriculum for Grade 5 based on Revised Bloom Taxonomy

Cognitive process dimension	Knowledge dimension					
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Factual knowledge	E5.1.R1	E5.1.L1				
	E5.4.R1	E5.2.L1				
		E5.3.L1				
Conceptual knowledge	E5.1.R2	E5.2.R1	E5.1.S1			
	E5.2.L2	E5.3.R1	E5.1.S2			
		E5.4.L1	E5.2.S1			
		E5.4.L2	E5.2.S2			
		E5.5.L1	E5.3.S1			
		E5.5.L2	E5.3.S2			
		E5.5.S1	E5.5.S2			
		E5.5.R1	E5.6.S1			
		E5.6.L1	E5.6.S3			
		E5.6.R1	E5.7.S1			
		E5.7.L1	E5.7.S2			
		E5.7.R1	E5.7.S3			
		E5.8.L1	E5.7.S4			
		E5.8.L2	E5.7.S5			
		E5.8.S4	E5.8.S2			
		E5.8.R1	E5.8.S3			
		E5.9.L1	E5.9.S1			
		E5.9.R1	E5.9.S2			
		E5.10.L1	E5.9.S3			
	E5.10.R1	E5.10.S1				
Procedural knowledge			E5.4.S1			
			E5.4.S2			
			E5.4.S3			
			E5.6.S2			
		E5.8.S1				
Metacognitive knowledge						

The 5th-grade English curriculum comprises a total of 52 outcomes. The analysis of these outcomes within the knowledge dimension of the taxonomy indicated that five of them were under the category of "factual knowledge," 42 pertained to "conceptual knowledge," and five aligned with "procedural knowledge." However, no outcomes were categorized under the metacognitive dimension in the 5th-grade English curriculum outcomes. Notably, the conceptual knowledge category found the highest number of outcomes.

The analysis of the outcomes based on the cognitive process dimension of the taxonomy showed that four outcomes corresponded to "remembering," 23 outcomes aligned with "understanding," and 25 outcomes fell under

"applying." However, no outcomes were categorized under the analysis, evaluation, and creation steps. Notably, the highest number of acquisitions was found in the applying step.

**Table 3.** Distribution of the Outcomes in English Curriculum for Grade 6 based on Revised Bloom Taxonom

Cognitive process dimension	Knowledge dimension					
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Factual knowledge	E6.2.L1 E6.5.L1 E6.10.L1	E6.6.L2				
Conceptual knowledge	E6.1.L1 E6.3.L1 E6.5.R2 E6.7.L1 E6.8.L1 E6.9.L1 E6.10.R1	E6.1.R1 E6.2.R1 E6.2.R2 E6.3.L2 E6.3.R1 E6.4.L1 E6.5.R1 E6.6.L1 E6.6.R1 E6.7.R1 E6.8.L2 E6.8.R1 E6.9.L2 E6.9.R1 E6.9.R2	E6.1.SI1 E6.1.SP1 E6.1.SP2 E6.2.SI1 E6.3.SI1 E6.3.SI2 E6.3.SP1 E6.4.SI1 E6.4.R1 E6.6.SP2 E6.8.SI1 E6.8.SP1 E6.8.SP2 E6.8.W1 E6.8.W2 E6.9.SI1 E6.10.SI1 E6.10.SP1			
Procedural knowledge			E6.2.SP1 E6.3.SP2 E6.4.SP1 E6.5.SI1 E6.5.SP1 E6.6.SI1 E6.6.SP1 E6.6.W1 E6.7.SI1 E6.7.SP1 E6.7.W1 E6.8.SI2 E6.8.SP1 E6.9.SP1 E6.9.W1 E6.10.SP2 E6.10.W1			
Metacognitive knowledge						

The 6th grade English curriculum consisted of a total of 60 outcomes. The analysis of these outcomes based on the knowledge dimension showed that 4 fell under "factual knowledge," 40 aligned with "conceptual knowledge," and 17 pertained to "procedural knowledge." There were no outcomes classified under the metacognitive knowledge level, and the majority of the outcomes were in the conceptual knowledge dimension.

The examination the outcomes in the 6th grade English curriculum from the cognitive process dimension of the taxonomy revealed that 10 of them corresponded to "remembering," 16 to "understanding," and 34 to "applying." There were no outcomes categorized under the analyzing, evaluating, and creating steps. It was found that the most significant number of outcomes was concentrated in the applying step.

**Table 4.** Distribution of the Outcomes in English Curriculum for Grade 7 based on Revised Bloom Taxonomy

Knowledge dimension	
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Cognitive process dimension	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Factual knowledge	E7.2.L1					
	E7.4.L2					
	E7.6.L1					
	E7.8.L1					
Conceptual knowledge	E7.3.L1	E7.1.L1	E7.1.SI1			
	E7.8.R1	E7.1.R1	E7.1.W1			
	E7.9.R1	E7.2.R1	E7.2.SI1			
	E7.10.R2	E7.3.R1	E7.2.SP1			
		E7.4.L1	E7.4.SI1			
		E7.4.R1	E7.5.SI1.			
		E7.4.R2	E7.5.SI2			
		E7.5.L1	E7.5.SP1			
		E7.5.R1	E7.5.SP2			
		E7.5.R2	E7.6.SI1			
		E7.6.R1	E7.6.SP2			
		E7.7.L1	E7.7.SI1			
		E7.7.R1	E7.8.SI1			
		E7.8.L2	E7.9.SI1			
		E7.9.L1	E7.9.SI2			
		E7.9.L2	E7.9.W1			
		E7.10.L1	E7.10.SI1			
		E7.10.R1	E7.10.SI2			
			E7.10.W1			
	Procedural knowledge			E7.1.SP1		
			E7.2.W1			
			E7.3.SI1			
			E7.3.SP1			
			E7.3.W1			
			E7.4.SP1			
			E7.4.SP2			
			E7.4.W1			
			E7.5.W1			
			E7.6.SP1			
			E7.6.W1			
			E7.7.SP1			
			E7.7.W1			
			E7.8.SP1			
		E7.8.W1				
		E7.9.SP1				
		E7.9.W2				
		E7.10.SP1				
Metacognitive knowledge						

There were 63 outcomes in 7th grade English curriculum. According to the knowledge dimension, it was determined that 4 of the outcomes were in the "factual knowledge", 41 in the "conceptual knowledge" and 18 in the "procedural knowledge" stage. In addition, there was no outcome in the metacognitive knowledge level. It was found that most of the outcomes were in the conceptual knowledge dimension.

According to the cognitive process dimension of the taxonomy, it was seen that 8 of the outcomes were in the "remembering", 18 in the "understanding" and 37 in the "applying" steps. While the most outcomes were in the applying step, there was no outcome in the analyzing, evaluating and creating steps.

**Table 5.** Distribution of the Outcomes in English Curriculum for Grade 8 based on Revised Bloom Taxonomy

Cognitive process dimension	Knowledge dimension					
	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Factual		E8.4.L1				

knowledge		E8.4.R1		
Conceptual knowledge	E8.9.L1	E8.1.L1 E8.1.R1 E8.1.R2 E8.2.L1. E8.2.R1 E8.3.L1 E8.3.R1 E8.4.L2 E8.5.L2 E8.6.L1 E8.7.L1 E8.8.L3 E8.8.R1 E8.9.R1	E8.2.SI1 E8.2.W1	
Procedural knowledge		E8.3.R2 E8.5.L1 E8.5.SI1 E8.5.SI2 E8.5.SP1 E8.5.R1 E8.5.R2 E8.6.L2 E8.6.R1 E8.7.R1 E8.8.L1 E8.8.L2 E8.9.R2 E8.10.L1 E8.10.R1	E8.1.SI1 E8.1.SP1 E8.1.W1 E8.2.SP1 E8.2.SP2 E8.3.SI1 E8.3.SP1 E8.3.W1 E8.4.SI1 E8.4.SP1 E8.4.W1 E8.5.W1 E8.6.SI1 E8.6.SI2 E8.6.SP1 E8.6.W1 E8.7.SI1 E8.7.SI2 E8.7.SP1 E8.7.SP2 E8.7.SP3 E8.7.W1 E8.8.SI1 E8.8.SI2 E8.8.SP1 E8.9.SI1 E8.9.SI2 E8.9.SP1 E8.9.SP2 E8.9.W1 E8.10.SI1	E8.10.SI2 E8.10.SP1 E8.10.SP2 E8.10.W1
Metacognitive knowledge			E8.8.W1	

Table 5 revealed that there were a total of 70 outcomes in the 8th-grade English curriculum. In terms of the knowledge dimension of the taxonomy, there were two outcomes classified as "factual knowledge," 17 outcomes as "conceptual knowledge," 50 outcomes as "procedural knowledge," and one outcome as "metacognitive knowledge." Notably, the least number of outcomes were found in the factual and metacognitive knowledge levels, while most acquisitions were in the procedural knowledge stage.

The analysis of the cognitive process dimension of the taxonomy showed that, out of the 70 outcomes, one fell under "remembering," 31 under "understanding," 34 under "applying," and four under "analyzing." It was found that the fewest outcomes were in the remembering and creating steps, while the most outcomes were in the applying step.

## DISCUSSION AND CONCLUSION

This study aimed to analyze the outcomes in the lower secondary education English teaching curriculum designed by the Ministry of National Education in 2018, based on the Revised Bloom Taxonomy's knowledge and cognitive process dimensions. This is because Revised Bloom's Taxonomy conforms to the core logic of the 2018 revision since "competence" as the updated pedagogical paradigm of "knowing" was revised to "doing." As Akpınar (2017) states, Bloom, and his team pioneered the classification of the outcomes in the curriculum. Krathwohl later revised their classification so that each output expresses a verb. This revision underpins current contemporary teaching programs. An analysis of outcomes in the English Teaching Curriculum in Grades 5, 6, 7, and 8 put forward that the majority of the achievements (56.3%) are in the dimension of "conceptual knowledge," according to the "knowledge" dimension of the Revised Bloom Taxonomy. The ratios are, respectively, "procedural knowledge" 36.8%, "factual knowledge" (6.1%), and metacognitive knowledge (0.8%). On the contrary, it was concluded that the lowest number of outcomes is in the "metacognitive knowledge" step (0.8%). An analysis of outcomes for the "cognitive process" dimension points out that outcomes intensify in "applying" (53.9%) followed by "understanding" (34.7%), "remembering" (9.4%), "analyzing" (1.6%) and "creating" (0.4%), respectively. Therefore, the English teaching curriculum does not have evenly distributed knowledge and cognitive-process classifications. Students' mental development levels were used for the evaluation process as the most crucial element of the curriculum. Hamurcu and Ekinci (2020) state that the English teaching curriculum for Grade 5 includes outcomes for 'remembering,' 'understanding,' and 'applying' in the cognitive process dimension of RBT, while none is available for any of the four basic skills boost students' metacognitive thinking skills such as "analyzing," "evaluating" and "creating." Studies (Abdelrahman, 2014; Baş & Beyhan, 2012; Evcim & Özenici, 2019; Gökler et al., 2012; Igbaria, 2013; Utami et al., 2019) suggest that not just the exam questions but also the coursebooks for English curriculums focus on a similar level of knowledge and aim at low-level thinking skills. Analyzing the English teaching program and coursebook activities for Grade 9, Öztürk (2019) pointed to serious conceptual and metacognitive knowledge gaps.

Accordingly, it is seen that there are few outcomes in the upper-level steps of the knowledge and cognitive process dimensions of the English teaching curriculum. According to Aydın and Yılmaz (2010), it is necessary to include high-level cognitive outcomes for students to have advanced cognitive skills. Education programs can raise students who research, question, create logical solutions, and produce knowledge (Güldüren & Cangüven, 2020). For an effective English curriculum, it is necessary to focus on high-level cognitive steps to ensure the permanence of the outcomes. Concentrating on "analyzing," "evaluating," and "creating" in the cognitive process outcomes is highly essential to increasing high-level thinking skills and providing effective teaching (Çerçi, 2018; Mayer, 2002). Highlighting them shall also be essential to ensure that students can make analyses and evaluations expected by the 21st century (Çerçi, 2018).

It should also be noted that the cognitive process dimensions should be enhanced as the students' grade levels increase. It was found that outcomes enhanced, and the "analyzing" and "creating" stages appeared in Grade 8. The English teaching curriculum for Grades 5, 6, and 7 does not intensify cognitive process dimensions. Anderson and Krathwohl (2010) highlighted the importance of increasing cognitive levels for quality education as the grade levels rise. The fact that abstract thinking skills are not developed in young children may be the reason for the lack of outcomes that require high-level thinking skills in the early stages. Limited course hours and an intense curriculum are also why the outcomes in the cognitive dimension are not aimed at high-level skills. Some studies reported that the inverse proportion of course hours and curriculum density negatively affected language learning and retention. (Günday, 2007; Kuloğlu & Tutuş, 2022; Songbatumis, 2017; Teevno, 2011). The present study showed that the 5th, sixth, and 7th Grade outcomes are practice-based. In order to be successful, students must be exposed to language not only in the classroom but also outside the classroom. Thus, environments where children can only speak English outside of school can be established, and children can meet with native English speakers in these places (Tutuş, 2020). The lack of outcomes for high-level cognitive skills in the 5th, 6<sup>th</sup>, and 7th grades may lead to rote learning and memorization. Koç (2007) states that learning at the knowledge level occurs only by memorizing. In addition, Hamurcu and Ekinci (2020) thought that imposing a memorization method with the least permanence would not benefit young children, considering the outcomes. As a result of this study, it was found that the 5th, 6<sup>th</sup>, and 7th grade English curriculum could progress to the application and procedural knowledge levels. In the 8th grade, however, achievements belonged to creating and metacognitive knowledge domains, albeit a little. Accordingly, 5th, 6th, and 7th grade curricula can be revised based on the development of the students in order to measure advanced mental skills. In the 8th grade, more outcomes regarding the metacognitive dimension and the creating step can be included. In this way, students' ability to exercise their minds

and use the language can also improve. In addition, in preparing the outcomes, the number and levels of outcomes can be reduced based on the students' levels, practical activities and materials can be used, and content to use the language can be prepared. Schools should organize activities for applying as foreseen by the Ministry. The conformity of the outcomes and content to the curriculum can reflect on the behavior of the individuals applying the knowledge.

#### **Statements of Publication Ethics**

The Firat University Social and Human Sciences Research Ethics Committee approved the ethical permission for the research. The date of approval is 03.05.2021. The document number of approval is E-97132852-302.14.01-4258.

#### **Researchers' Contribution Rate**

All authors contributed equally to this work.

#### **Conflict of Interest**

This study has no conflict of interest.

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