BASKENT UNIVERSITY
INSTITUTE OF EDUCATIONAL SCIENCES
DEPARTMENT OF FOREIGN LANGUAGE TEACHING
MASTER IN ENGLISH LANGUAGE TEACHING WITH THESIS

EVALUATION OF AN EFL COURSEBOOK THROUGH THE LENS OF HESS' COGNITIVE RIGOR MATRIX: AN ANALYSIS OF LISTENING ACTIVITIES

BY

MÜGE UZALDI

MASTER'S THESIS

THESIS ADVISOR
ASST. PROF. DR. SEVGİ ŞAHİN

ANKARA – 2024

BAŞKENT ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ

Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Öretimi Tezli Yüksek Lisans Programı çerçevesinde Müge UZALDI tarafından hazırlanan bu çalışma, aşağıdaki jüri tarafından Yüksek Lisans Tezi olarak kabul edilmiştir.

Tez Savunma Tarihi: 19 / 01 / 2024

Tez Adı: İngilizcenin Yabancı Dil Olarak Öğretiminde Kullanılan Bir Ders Kitabının Hess'in Bilişsel Düzey Matrisi Açısından İncelenmesi: Dinleme Aktivitelerinin Analizi

Tez Jüri Üyeleri	**İmza**
Prof. Dr. Nuray Alagözlü (Hacettepe Üniversitesi)	..……
Dr. Ögr. Üyesi Sevgi Şahin (Başkent Üniversitesi)	..……
Dr. Ögr. Üyesi Gözde Balıkçı (Başkent Üniversitesi)	..……

ONAY

Prof. Dr. Servet Özdemir
Eğitim Bilimleri Enstitüsü Müdürü
Tarih … / … / ……

BAŞKENT ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ
YÜKSEK LİSANS ORİJİNALLİK RAPORU

Tarih: 20 / 12 / 2023

Öğrencinin Adı, Soyadı: Müge UZALDI

Öğrencinin Numarası: 1870112

Anabilim Dalı: Yabancı Diller Eğitimi

Programı: İngiliz Dili Öğretimi Tezli Yüksek Lisans Programı

Danışmanın Unvanı / Adı, Soyadı: Dr. Öğr. Üyesi Sevgi ŞAHİN

Tez Başlığı: İngilizcenin Yabancı Dil Olarak Öğretiminde Kullanılan Bir Ders Kitabının Hess'in Bilişsel Düzey Matrisi Açısından İncelenmesi: Dinleme Aktivitelerinin Analizi

Yukarıda başlığı belirtilen Yüksek Lisans tez çalışmamın; Giriş, Ana Bölümler ve Sonuç Bölümünden oluşan, toplam 95 sayfalık kısmına ilişkin, 20 / 12 / 2023 tarihinde şahsım/tez danışmanım tarafından Turnitin adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı %19'dur. Uygulanan filtrelemeler:

1. Kaynakça hariç
2. Alıntılar hariç
3. Beş (5) kelimeden az örtüşme içeren metin kısımları hariç

"Başkent Üniversitesi Enstitüleri Tez Çalışması Orijinallik Raporu Alınması ve Kullanılması Usul ve Esaslarını" inceledim ve bu uygulama esaslarında belirtilen azami benzerlik oranlarına tez çalışmamın herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Öğrenci İmzası: ……..

ONAY

Tarih: … / … / ……

Öğrenci Danışmanı Unvan, Ad, Soyad, İmza:

Dr. Öğr. Üyesi Sevgi ŞAHİN

…….

To those who pursue the new light of tomorrow…

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my lovely advisor, Assist. Prof. Dr. Sevgi Şahin, for her unwavering support, guidance, and valuable feedback throughout the entire process of my master's thesis. I am grateful for the countless hours of enlightening discussions with her. I am also grateful to Prof. Dr. Nuray Alagözlü and Assist. Prof. Dr. Gözde Balıkçı for their insightful comments and suggestions. Furthermore, I express my gratitude to Dr. Karin Hess for stimulating my interest in this subject through her Cognitive Rigour Matrix and for providing me with encouragement via email.

I express my heartfelt gratitude to my mother, father, and brother for their unwavering support, endless love, and understanding. Their encouragement and faith sustained me through the challenges of this academic endeavor.

I am fortunate to have worked alongside an exceptional group of colleagues, especially my dear friend Şeyda, at the Middle School English Department of Nesibe Aydın Educational Institutions. They were indispensable supporters, and their camaraderie made the research journey enjoyable. I also feel so lucky to have these lovely students of mine. Teaching them throughout the writing process was so inspiring, and it was comforting to feel their best wishes in my heart.

To my friends, Nazlı and Demet, thank you for being a source of motivation and for sharing both the joys and trials of this academic pursuit. Thank you, Gizem and Büşra, for your psychological support and various kinds of entertainment during this process. Special thanks to the beloved couple Pınar and Mehmet for sharing their profound knowledge with me whenever I needed them. Last but not least, thank you, Burcu, Duygu, and Melih, for being so sympathetic when I continuously used my thesis as an excuse not to go out and have fun with you. I genuinely believe that we have so many great adventures ahead of us.

This thesis would not have been possible without the collective support of all these individuals and organizations. I am truly grateful for their contributions to this academic journey.

ÖZET

Müge UZALDI

İngilizcenin Yabancı Dil Öğretiminde Kullanılan Bir Ders Kitabının Hess'in Bilişsel Düzey Matrisi Açısından İncelenmesi: Dinleme Aktivitelerinin Analizi

Başkent Üniversitesi

Eğitim Bilimleri Enstitüsü

Yabancı Diller Eğitimi Anabilim Dalı

İngiliz Dili Öğretimi Tezli Yüksek Lisans Programı

2024

Bu çalışmanın amacı, Millî Eğitim Bakanlığı tarafından sekizinci sınıf öğrencileri için hazırlanan *Mastermind* ders kitabının içerisindeki dinleme etkinliklerini değerlendirmektir. Ayrıca, kitapta geçen dinleme etkinliklerindeki soruların bilişsel ve bilgisel düzeylerine bakarak bu etkinliklerin ne derece yüksek düzeyde düşünme becerilerini geliştirdiğini incelemeyi amaçlamaktadır. Bu karma yöntem araştırma çalışması, araştırma metodolojisinin bileşenleri olarak betimleyici istatistikleri ve sistematik içerik analizini kullanılarak yürütülmüştür. Bu doğrultuda, ilk olarak, ders kitabındaki tüm dinleme etkinlikleri belirlenmiş ve dinleme türleri tespit edilmiştir. İkincil olarak, Bloom'un Taksonomisi ve Webb'in Bilgi Derinliği'ne göre hangi konumlarda olduğunun belirlenmesi amacıyla tüm dinleme etkinlikleri Hess'in Bilişsel Düzey Matrisi aracılığıyla analiz edilmiştir. Bulgular, ders kitabında yer alan dinleme etkinliklerinin çoğunluğunun daha düşük düzeyli bilişsel basamakta olduğu tespit edilmiştir. Çalışma, üst düzey düşünme ve dinleme egzersizlerinin de dâhil edilmesinin gerekliliğini vurgulamaktadır. Bu çalışma yabancı dil öğrenenlerin dinleme etkinlikleriyle etkileşime geçmelerine ve kazanılan dinleme becerilerini yeni ortamlara aktarmalarına yardımcı olmak için üst bilişsel basamakta olan etkinliklerinin kullanılması gerektiğini de ayrıca vurgulamaktadır.

Anahtar Kelimeler: Ders Kitabı Değerlendirmesi, Dinleme Etkinlikleri, Bloom'un Taksonomisi, Webb'in Bilgi Derinliği, Hess'in Bilişsel Düzey Matrisi

ABSTRACT

Müge UZALDI

Evaluation of an EFL Coursebook through the Lens of Hess' Cognitive Rigor Matrix: An Analysis of Listening Activities

Başkent University

Institute of Educational Sciences

Department of Foreign Language Teaching

Master In English Language Teaching With Thesis

2024

The purpose of the current study is to evaluate the presentation of listening activities in *Mastermind*, published by the Ministry of National Education as a coursebook for eighth-grade students. Moreover, it attempts to analyze the units of the coursebook to examine the extent to which they represent higher-order thinking skills by detecting cognitive levels and knowledge dimensions of listening questions in the corresponding listening activities. This mixed methods research study was conducted through the utilization of qualitative content analysis and descriptive statistics. To this end, first, the whole coursebook was scrutinized to gather all listening activities to reveal the kinds of listening students are expected to engage in. Secondly, all the listening activities were analyzed through a coding scheme, the Hess' Cognitive Rigor Matrix, to see which levels of Bloom's Revised Taxonomy and Webb's Depth of Knowledge were emphasized. The findings showed that the majority of the listening activities represented in the coursebook facilitated lower-order thinking. The study emphasizes the necessity of including higher-order thinking and listening exercises. This study may also highlight the need for cognitively challenging listening activities to help language learners interact with authentic listening tasks and transfer acquired listening skills to new settings.

Keywords: Coursebook Evaluation, Listening Activities, Bloom's Taxonomy, Webb's Depth of Knowledge, Hess' Cognitive Rigor Matrix

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

Page

LIST OF ABBREVIATIONS

ELT	English Language Teaching
HCRM	Hess' Cognitive Rigor Matrix
DOK	Depth of Knowledge
MoNE	Ministry of National Education
FLE	Foreign Language Education
CEFR	Common European Framework of Reference
EFL	English as a Foreign Language
LOTS	Lower Order Thinking Skills
HOTS	Higher Order Thinking Skills
CoE	Council of Europe
CA	Content Analysis

CHAPTER I
INTRODUCTION

This chapter presents and discusses the background of the present study, statement of the research problem, purpose of the study followed by the research questions, and finally the significance of the study.

1.1. Background of the Study

The evaluation of coursebooks maintains its importance in the field of education. This is mainly because of the perpetual and indispensable changes and diversity in student profiles, learners' needs and interests, teachers' teaching philosophy, and the educational context. Therefore, it is an important process to make sure a coursebook is suitable for a specific learner group with a certain language learning impetus aligned with national educational values as well. To be able to provide the optimum conditions for education, coursebooks need to be developed, evaluated, and selected carefully since they are the cornerstone of the teaching and learning process (Sheldon, 1988). It is important to consider that instructional materials have the potential to inform learners about the language, provide exposure to the language in use, stimulate language use, or facilitate discoveries about language use (Tomlinson, 2001). That is why the process of selecting the most appropriate coursebook and deciding on how to implement it in the classroom has primary importance for teachers because, in most cases, they have the responsibility to decide on or have a say about which materials best suit their learners' needs. Furthermore, the process of selecting and adapting instructional materials holds considerable importance in enabling learners to effectively demonstrate their full capacity for learning (Kazempourfard & Razmjoo, 2012).

Coursebooks also play an important role in teaching English as a Foreign Language (EFL) because they tend to include the primary linguistic input for students who do not get to hear the language in their daily lives (Kim & Hall, 2002; Sheldon, 1988), particularly in countries where English is a foreign language, which learners are often exposed to in school environments. According to Mishan and Timmis (2015), there are certain scenarios in which the learners' principal exposure to the target language will be through the use of

materials, specifically coursebooks. In many contexts, materials are viewed as the foundation of a particular program and are frequently the most visible representation of what occurs in the classroom (McDonough et al., 2013). Furthermore, materials may represent a considerable investment on a professional, financial, or political level, which is still another reason why a principled and systematic review is necessary (Sheldon, 1988).

According to a felicitous definition by Tomlinson (2012), “materials evaluation is a procedure that involves measuring the value (or potential value) of a set of learning materials. It involves making judgments about the effect of the materials on the people using them” (p. 15). Coursebook evaluation is conducted in different ways and through a variety of methods for various purposes in different educational contexts (e.g., pre-use evaluation, in-use evaluation, and post-use evaluation (Tomlinson, 2003b). Coursebook evaluators may prefer to quickly and easily acquire a basic opinion of a coursebook simply by perusing it and gaining an overview of its capabilities, strengths, and flaws (Cunningsworth, 1995). This type of evaluation is called an "impressionistic overview," and it enables us to have a general opinion of a coursebook before analyzing it in a detailed way. In addition to examining what is prominent and obvious in a coursebook, we must assess how specific items are addressed, especially those that relate to students' learning needs, syllabus requirements, how different components of language are addressed, etc. (Cunningsworth, 1995). Such a judgment of a coursebook is called an “in-depth evaluation." This approach, also called “principled evaluation” (Mishan & Timmis, 2015, p. 56), to coursebook evaluation requires a systematic analysis of the material. That entails utilizing a pre-established checklist of criteria (McGrath, 2002). However, as Williams (1983) noted, a checklist cannot be a static phenomenon. Like other forms of evaluation tools, the categories in materials evaluation checklists reflect the time period and ideologies of their creators just as much as the published materials themselves (McGrath, 2002). Eventually, combining an overall review and an in-depth examination of the coursebook by using the most appropriate checklist would provide a solid foundation for evaluation and ensure determining the most suitable coursebook.

It is unlikely that any coursebook or collection of information will attain perfection, and there is currently no consensus regarding the criteria or methods for evaluation (McDonough et al., 2013). However, one of the most important factors in coursebook evaluation is creating or choosing the most appropriate checklist, which includes the most

suitable criteria for the specific learning context. As Tomlinson states (2003b), the crucial aspect lies in ensuring that an evaluation adheres to a set of principles, wherein the evaluator explicitly states their principles and utilizes them as a basis for determining and implementing the evaluation processes. Regardless of the framework of criteria chosen, whether it is designed, adapted, or adopted, it is essential to carefully evaluate the process of generating precise criteria for each category and effectively operationalizing the framework (Mishan & Timmis, 2015).

Some educators consider the process of selecting or adapting coursebooks to be helpful, especially when it is difficult to organize authentic materials for each class. On the other hand, teachers may have a duty to utilize a certain coursebook that they consider to be insufficient. In such instances, they may choose to assess it according to the specific requirements of their students, employing a practical checklist for evaluating contents found in pertinent literature or modifying it to suit the educational environment. Teachers have a crucial role in the implementation and achievement of materials evaluation, adaptation, or development in every situation.

The importance of choosing a suitable coursebook that matches the learning aims and objectives of a particular set of learners is clearly visible in English language teaching. The wide range of EFL coursebooks, published both locally and worldwide, can be overwhelming for teachers and institutions (Cunningsworth, 1995). This presents a dilemma for educators and administrators who need to choose the best appropriate coursebook depending on learners' characteristics and curriculum goals. Hence, it is crucial to conduct a thorough examination of the learning environment, encompassing aspects such as national curricula, educational objectives, language learning goals, syllabi, and evaluation techniques, as emphasized by McGrath (2002). According to Mishan and Timmis (2015), both the qualifications and expertise of the instructor are equally important as the excitement and expectations of the students in this context analysis.

As mentioned above, there are several criteria to be considered in coursebook evaluation, and how coursebooks deal with the four language skills (listening, speaking, reading, and writing) is a critical point to be discussed (Cunningsworth, 1995). All four skills are adequately covered in some coursebooks, while others may focus solely on one. It depends on the aims and objectives of the lesson and the needs of potential learners. Some students may tend to show more progress in reading while needing more guidance

on listening as a skill. In such circumstances, skills-based coursebooks that are specifically based on listening may be the perfect fit for them. On the other hand, coursebooks that include all four skills together are also very common because they tend to be more economical and practical for stakeholders. An additional factor to be taken into account is the nature of the material used for skill development, which may be specifically created for the coursebook, semi-authentic (initially authentic but adapted), or fully authentic. With authentic or semi-authentic content, we can be sure that the language patterns being taught are real, especially when it comes to discourse structure, which can be challenging to accurately recreate when writing specifically for a coursebook (Cunningsworth, 1995).

One of the most significant purposes of EFL teaching materials is to expose learners to the comprehensible, authentic use of language so that they can understand and produce the target language effectively and communicatively in real life (Tomlinson, 2012). Of the four language skills, listening is the most challenging because it requires significant cognitive processes to comprehend messages (Şahin, 2015), find ways to express one's own ideas through language use, and listen to people speaking the target language, possibly with different accents due to the idea of World Englishes (Kachru, 1992). Thus, it is critical to have the capacity to comprehend speakers of all varieties and proficiency levels from inner, outer, and expanding circle contexts, as well as to adapt (McKay & Brown, 2015). Additionally, it is known that materials for learners at all levels must expose them to real usage of English through spoken and written texts that have the ability to stimulate their cognitive and affective engagement (Tomlinson, 2008). There is also substantial evidence that one of the simplest and most effective ways to provide such exposure is through extensive listening (Elley 2000; Krashen 1993), in which the learners listen to what they wish without being required to complete any tasks during or after their exposure to the texts. Listening is a demanding talent, which is why ELT coursebooks need to provide listening activities in such a way that students may build critical thinking methods to help them cope with the difficulty of this skill.

According to Cunningsworth (1995), the listening skill is handled in the coursebooks in two different ways. First, listening plays a secondary role with another skill, such as speaking, and it is usually part of an oral work. Roleplay can be exemplified in this category because in a well-controlled roleplay activity, learners are expected to use a specific set of language items and try to speak, listen, and respond to the other speaker.

This type of listening is quite unpredictable and often authentic, which enables learners to think quickly and develop cognitive strategies to cope with this challenging exercise. The second way of including listening skills in language coursebooks is "in its own right" (Cunningsworth, 1995). Listening to a passage for comprehension, extracting information, or listening before reading a passage (as a pre-reading task) can be put into this category. Therefore, setting the most suitable criteria (and using the appropriate checklist) while evaluating coursebooks in terms of the way they handle listening as a language skill has significant importance in materials evaluation. Many evaluation checklists have been created throughout the years to assist teachers in selecting textbooks in a systematic way (Breen & Candlin, 1987; Cunningsworth, 1984; Hutchinson & Waters, 1987; Littlejohn, 1998; McDonough & Shaw, 1993; Sheldon, 1988; Tucker, 1975; van Lier, 1979; Williams, 1983). These vary in how much they take into account the priorities and limitations that could be present in particular English Language Teaching (ELT) situations (Rubdy, 2003).

It is crucial to conduct an analytical assessment of coursebooks through the utilisation of precise criterion checklists. This is because identifying the merits and drawbacks of the instructional material not only facilitates the instructor's workflow but also improves the students' capacity to learn. Although it is acknowledged that these frameworks frequently help in guiding the selection of materials, one of the main concerns with their implementation is that it typically involves making general, impressionistic judgments about the materials rather than thoroughly examining what the materials contain (Littlejohn, 2011). For this reason, it is essential to conduct a comprehensive assessment of the coursebook in terms of the comprehensibility and quality of the language input it offers.

An additional critical element of effective language instruction is the utilization of appropriate questioning techniques, which foster the growth of students' analytical and deductive reasoning proficiencies. Teachers frequently address questions to students; students often ask questions to teachers or their classmates; and even the coursebooks provide many questions for the learners. All these questions vary in terms of their purpose and form. Yet, their importance is not negligible because they serve to activate learners' thinking skills. In their book, McTighe and Wiggins (2013) introduce the term "essential questions" and state their purpose as generating thought, investigation, and more questions—including thoughtful questions from students—rather than providing

mechanical responses. From this point of view, it can be concluded that well-asked questions encourage learners to think critically and improve their higher-order thinking skills, which refer to the top three levels of Bloom's Revised Taxonomy (i.e., analyzing, evaluating, and creating).

From this perspective, effective questioning becomes a crucial factor to be considered in coursebook evaluation since asking the essential questions guides learners to think critically because these questions are "provocative and generative" (McTighe & Wiggins, 2013). By using these kinds of questions, learners are actively involved in revealing their depth and richness, instead of just covering a topic. The more learners are exposed to essential questions, the more they tend to improve their critical thinking skills. Therefore, not only the teacher but also the language learning material itself is an effective resource in terms of language input, and it is crucial for a coursebook to include questions that foster higher-order thinking in learners. With the importance of asking important questions and improving learners' cognitive abilities in mind, the researcher seeks to determine whether a specific ELT coursebook fosters higher-order cognitive skills through its listening activities, while also taking into account the difference in listening skills between real-life and scripted texts.

People who listen to a foreign language in real life or in reaction to real material do it very differently from people who listen to a scripted passage where the language has been graded to fit their level. Listening to a foreign language is a strategic thing to do in real life, and students require instruction and practice with this procedure (Richards & Renandya, 2002). The primary objective of listening instruction is to ultimately equip students with the skills necessary to navigate the authentic listening scenarios they are bound to confront in their daily lives (Ur, 2012). At that point, Bloom's Taxonomy, especially Bloom's Revised Taxonomy (2001), is an important consideration to take into account while choosing and/or evaluating the coursebooks. It has been used by many researchers (Razmjoo & Kazempourfard, 2012; Riaz & Mosalaejad, 2010) in evaluating the cognitive levels of the questions appearing in coursebooks as a frame for their work, resulting in the fact that lower-order cognitive skills (remembering, understanding, and applying) were more dominant than the higher ones (analyzing, evaluating, and creating) (Assaly & Smadi, 2015).

In the current era of globalization, integrated and dynamic multiskilled instructional models that emphasize meaningful communication and the growth of learners' communicative competence are highly valued by pragmatic language learning objectives (Hinkel, 2006). Our brain needs to use cognitive skills to complete an activity, and Bloom's Taxonomy helps to categorize and define the types of thinking patterns necessary to provide an answer. By examining the cognitive aspect of questions included in the coursebooks, though, the knowledge dimension tends to be underestimated. One of the best-known tools for measuring the depth of knowledge in language patterns is Webb's Depth of Knowledge, which will be described in more detail in this paper. For this particular research, a checklist called Hess' Cognitive Rigor Matrix has been planned to be used because it has been developed by including not only the cognitive thinking levels (based on Bloom's Revised Taxonomy) but also the knowledge dimensions (based on Webb's Depth of Knowledge). The researcher intends to employ this matrix to perform a principled coursebook analysis, concentrating on the listening sections of an English as a Foreign Language (EFL) coursebook. The analysis will encompass both cognitive and knowledge dimensions, and therefore it is believed that it will yield more comprehensive and valid insights.

1.2. Statement of the Research Problem

The coursebook has practically become a universal component of ELT because it plays such a significant and advantageous role in the everyday job of teaching and learning English (Hutchinson & Torres, 1994). Yet, selecting the right coursebook is a critical issue to cater to the needs and wants of the learners and fulfill the curriculum goals and objectives (Tsiplakides, 2011). It takes careful consideration to decide which coursebook to use and for what purposes it is intended to be used exactly. That is the main reason why coursebooks need to be evaluated carefully according to relevant criteria by using appropriate checklists.

Strong empirical evidence exists in ELT settings that coursebooks can provide practice activities, a structured language program for instructors to follow, language models, and language information (Richards, Tung, & Ng, 1992). Therefore, it is important to note that the goal of tasks used in language learning is to stimulate communication for learners. In order to provide a stimulating learning experience, it is imperative that

coursebooks incorporate listening activities that require students to engage a wide variety of cognitive abilities.

The cognitive levels of questions have been studied, classified, and represented by researchers so far, and the most known taxonomy was designed in a pyramid shape showing the different levels of thinking (Bloom et al., 1965). The bottom three levels of the taxonomy represent the lower-order thinking skills (i.e., remembering, understanding, and applying), whereas the upper three layers represent the higher-order thinking skills (i.e., analyzing, evaluating, and creating). Checking whether the included tasks and questions support learners' critical thinking skills has become an essential aspect of evaluating materials, as coursebooks have a significant influence on the development of students' higher-order thinking skills. Hence, coursebooks are highly recommended to foster critical thinking skills in students through the effective questions asked in the tasks.

In the past few decades, there has been a considerable amount of research conducted to evaluate the cognitive levels of the questions in the field of coursebook evaluation in various kinds of disciplines such as science, social studies, math, and language learning. These studies, especially the ones related to language teaching and learning, have shed light on whether and to what extent higher-order thinking skills (HOTS) or lower-order thinking skills (LOTS) predominate in coursebooks (Armbruster & Ostertag, 1989; Hampton et al., 1993; Ibrahim, 1998; Karns et al., 1993).

In terms of listening activities and designing a structure for a listening lesson, there are some controversial issues relating to the quality of the question types. For example, it is argued that there is a tendency to focus on the product of listening instead of the process—what is really going on inside learners' heads (Field, 2003). It is suggested that exercises should not just be used to improve low-level skills like word recognition; they can also be used to improve higher-level skills such as differentiating important pieces of information or anticipating. Likewise, students learn little when their sole attention is narrowed to providing the correct response to comprehension questions (i.e., the product) (Vandergrift, 2007). Another issue is the need to use authentic texts while listening. Field (2003) points out the fact that it is useless to assume that learners are going to recognize most of the words they hear if we are using authentic texts (Richards & Renandya, 2002). Instead, learners need to identify the key points of the text, make inferences by combining the parts they hear better, and make assumptions about what may come next, which really happens

in real-life listening situations. According to these issues that have been discussed about listening practice, it can be inferred that learners are expected to use some cognitive strategies in order to be successful listeners of language. To enhance students' critical thinking skills, it is imperative that the listening activities included in coursebooks integrate essential questions. The exercises in the coursebook should align with the curriculum developers' objective of facilitating language acquisition and fostering critical thinking skills in students.

The English Language Curriculum for Primary Education published by the Ministry of Education (MoNE) —The Committee of Education and Instruction (2018) claims to be established according to the students' characteristics, their developmental stages, and different learning styles to be able to serve both young and adult learners. Due to the significant differences in cognitive and social characteristics between these two learner groups, the curriculum considers these differences in all areas, including tasks and contexts, cognitive load, assessment and evaluation, and the kinds of language skills covered (TTKB, 2018). However, as an EFL teacher working in a secondary school in Turkey, it has been noticed by the researcher that students lack the ability to deal with questions successfully at the levels of higher-order thinking skills, and the coursebooks seem to use fewer questions stimulating HOTS. Furthermore, a considerable amount of research has been done on coursebook evaluation in terms of reading comprehension. Therefore, evaluating the listening activities and listening comprehension check questions and their cognitive levels is a process that aims to contribute to the results of earlier studies in the field of materials evaluation in ELT.

1.3. Significance of the Study

Learning a language requires the cognitive, social, cultural, and affective engagement of learners with the target language. When compared to the other language skills in language learning, listening is regarded as a receptive skill with different characteristic features because its process is highly unseen, which makes it difficult to teach (Goh & Vandergrift, 2012). This might be the reason why listening remains an understudied skill (Vandergrift, 2007), although it is one of the core language skills to develop for improving communication skills in foreign language learning.

English is the most popular language in the world, and it is widely used by many people for different purposes, such as business, education, travel, etc., all of which have paved the way for English as a Lingua Franca status. Also in Türkiye, English is the most commonly used foreign language, and its education has been even more prioritized with the recent changes in the Turkish educational system, which caused a transition from the 8+4 educational model to the 4+4+4 system (MoNE English Curriculum, 2018). The new system entails English language education starting in the 2nd grade rather than the 4th grade, and a high-quality language education is aimed at primary and lower secondary students (Şahin, 2019).

This research uses an English coursebook from the Turkish Ministry of Education (MoNE) for 8th grade students. Private schools have more lesson hours and use different curricula, leading to the use of exported ELT coursebooks. However, the free coursebook, *Mastermind*, prepared by MoNE is available for all schools and is based on the national curriculum, making it suitable for this study. This English curricular model ensures to adopt an action-oriented approach, focusing on learner autonomy, self-assessment, and cultural diversity, aiming to develop confidence, proficiency, and appreciation for English, while valuing a broad spectrum of international languages and cultures in accordance with Common
European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR) (TTKB, 2018). The CEFR clearly emphasizes the need of students applying their learning in real-life situations to enhance their fluency, competency, and ability to retain the language (CoE, 2001). This approach to language learning and teaching used to develop the national curriculum also adheres to Cummins' (1984) model, which promotes a transition in language and literacy skill development from cognitively undemanding to cognitively demanding, context-embedded tasks, advancing from familiar to unfamiliar topics (TTKB, 2018). In regard to the listening skill, eighth-grade students are anticipated to engage in cognitively more demanding activities in order to cultivate their critical thinking skills.

In contrast to the prevailing notion that listening is a passive skill necessitating no cognitive effort, it is in fact a cognitive process that necessitates active engagement to interpret and construct significance from both verbal and non-verbal cues during interpersonal exchanges (Nunan, 1998). Consequently, among all the other language skills

and domains, listening skills may be considered the most complex and difficult to enhance, if not the most multifaceted (Martinez, 2010), due to the fact that they necessitate not only comprehending and responding to what speakers are attempting to say but also occasionally simultaneously (during natural conversations) or immediately afterward (in the classroom) when interlocutors provide feedback (Şahin, 2015).

Due to the fact that English is used as a foreign language in Türkiye, students are expected to be exposed to the language mainly in the classroom environment. Since the coursebooks serve as a vital resource, providing the necessary amount of language input for students, they need to be evaluated regularly. In particular, research on listening comprehension in a language learning context has shown that it is a complex skill and therefore a precious area of study in ELT (McDonough et al., 2013). This study is unique in that it is the first to comprehensively analyze a nationwide ELT coursebook in relation to all facets of the listening skill.

It is a common understanding that there is no such term as a 'typical learner' due to the fact that learners vary in age, interests, learning styles, aptitude, motivation, and so on (McDonough et al., 2013). Also, in this time of globalization, the ever-changing needs of learners are to be considered while designing a lesson or setting the appropriate objectives. Therefore, it may not seem as realistic to find the perfect activity type or the most suitable coursebook for them. However, learners' listening comprehension can be improved by developing their ability to control their listening processes, and it has an impact on the success of language learning in general and the improvement of other skills. (Vandergrift, 2007).

Many educators, curriculum designers, and material developers benefit from Bloom's Revised Taxonomy by referring to it as a tool to evaluate coursebooks to raise their awareness in order to take meaningful steps towards developing students' higher-order thinking skills. However, existing literature regarding the MONE 8th grade English coursebook in Türkiye does not focus on the extent to which HOTS are fulfilled via questions used in listening exercises. In this regard, it can be argued that HOTS are necessary skills for the development of productive students, as productivity depends on the capacity of individuals to analyze, combine knowledge of various resources, discuss, assess, and evaluate. Consequently, the purpose of the coursebook is to develop students who are capable of critical thinking, problem-solving, planning, analyzing, and making

decisions. Therefore, it is essential to analyze the English coursebook to identify the extent to which students' higher-order thinking skills have been reflected in the listening activities.

1.4. Purpose of the Study

Listening, being a cognitive process, necessitates critical thinking for optimal comprehension by language learners. Hence, it is imperative that the activities designed by educators or offered through course materials promote the development of students' critical thinking skills. In this respect, the aim of this study is to investigate to what extent the lower-order and higher-order thinking skills are represented in the listening comprehension activities in the 8th grade coursebook by the Ministry of National Education (MoNE), *Mastermind*. The main purpose of this study is to examine the listening activities with respect to the following criteria: listening position (whether the listening skill is in the primary or secondary position), processing model (bottom-up, top-down, or interactive model), listener role (whether it is a reciprocal or non-reciprocal listening activity), listening type (distinctive, comprehensive, critical, evaluative, appreciative), listening task type (brainstorming, chart filling, dialogue, gap filling, editing, information gap, opinion gap, role play, sequencing, and true-false), and listening purpose (listening for gist, listening for specific information, listening in detail for literal meaning and for inferential meaning). It also identifies the cognitive levels and knowledge dimensions of the listening questions in line with Webb's Depth of Knowledge and Bloom's Taxonomy by using Hess' Cognitive Rigor Matrix as a coding scheme.

1.4.1. Research Questions

The current study seeks to answer the following research questions:

1. What are the kinds of listening that the students engage with the listening activities included in the 8th-grade coursebook "*Mastermind*" published by the Ministry of National Education?

2. What is the extent to which cognitive levels of Bloom's Revised Taxonomy and knowledge dimensions of Webb's Depth of Knowledge are represented in listening activities in *Mastermind*?

2.1 To what extent do the listening activities of *Mastermind* include questions at LOTS level?

2.2 To what extent do the listening activities of *Mastermind* include questions at HOTS level?

CHAPTER II
LITERATURE REVIEW

This chapter of the study focuses primarily on coursebook evaluation, especially from an ELT background, teaching listening, and its reflection in the English Language Teaching (ELT) coursebooks. Within the scope of higher and lower levels of thinking, this chapter later gives detailed information about Bloom's Revised Taxonomy, Webb's Depth of Knowledge, and Hess' Cognitive Rigor Matrix, which can be called the combination of both. Towards the end of this chapter, effective questioning is defined, followed by a review of related studies.

2.1. Coursebook Evaluation

In the ELT classroom, materials play an important role by contributing to the teacher's methodology and helping the curriculum be fulfilled. Everything that teachers use in a teaching environment, including real-life objects, newspapers, TV broadcasts, radio podcasts, and even love letters, can be counted as "teaching materials." Coursebooks might serve different purposes in a language learning environment. A reading coursebook, combining reading texts and exercises, can serve as the foundation for a reading skills course, while a listening text alongside audiocassettes or CDs could serve as the primary listening input for a listening course (Richards, 2001). Therefore, the evaluation of these materials is a systematic process used by educators and curriculum developers to evaluate the suitability, effectiveness, and adequacy of instructional materials such as coursebooks, worksheets, audiovisual aids, and online resources used in English language classrooms. This evaluation seeks to ensure that the selected materials align with the learners' specific requirements and objectives, the instructional context, and the principles of effective language teaching. Brown (1987) provides the most comprehensive definition of evaluation by stating that it is the systematic collection and analysis of all relevant information necessary to promote the improvement of the curriculum and assess its effectiveness and efficiency, as well as the attitudes of participants within the context of the particular institutions involved. Tomlinson (2003c) also provides the following definition of evaluation: "Materials evaluation is a procedure that involves measuring the value (or potential value) of a set of learning materials."

Coursebooks still hold the number one position in ELT for a number of reasons. First of all, a coursebook is a source of activities for learner practice and communicative interaction. It serves as a valuable tool for both educators and students, offering a comprehensive outline of lesson content and a structured framework that enhances the organization of individual sessions and the overall course (Richards, 2015). For students, it can serve as a tool for self-directed learning or self-access work. For teachers, on the other hand, a coursebook is a syllabus where they can reflect their learning objectives (Cunningsworth, 1995).

According to Cunningsworth (1995), the abundance of published resources currently accessible in the market presents a formidable challenge in choosing the proper coursebook. Consequently, teachers must exercise informed judgment and make suitable decisions when picking coursebooks and supplementary materials. It is a fact that language teachers are consistently evaluating the materials they use, and they are accustomed to it. As Amrani (2011) notes about teachers evaluating materials:

> They do it all the time, from wandering casually around a bookshop, choosing a new book, or borrowing a new idea gleaned from a conference presentation or colleague, to surfing the internet for discussion and resource sites to gather together new materials (p. 270).

In his work, McGrath (2002: 8) provides a compilation of metaphors employed by teachers to articulate their perception of the coursebook's function. These metaphors include terms such as 'recipe', 'springboard', 'straightjacket', 'supermarket', 'holy book', 'compass', 'survival kit', and 'crutch'. Due to all the support they provide for teachers and learners at the same time, coursebooks are very popular in the ELT field. A coursebook is perceived as one of the numerous resources that teachers can use to construct engaging and effective courses, as well as provide a framework for guidance and orientation (Graves, 2000).

It has been argued that coursebook evaluation enables educators to gain meaningful, accurate, systematic, and contextual insights on the nature of coursebook content as a whole (Cunningsworth, 1995). This is why a comprehensive evaluation can analyze the real utility and efficacy of the inputs in the English language coursebook and its supplementary materials (Huong, 2018). Does the material promote autonomy? Do they

solve problems? Do they prioritize a learner-centered approach? Do they exhibit cross-curricular characteristics? Are "multiple intelligences" used? As Littlejohn (2011) indicates frankly, “We need, in short, a means of looking inside the Trojan Horse to see what lies within.” (p. 181). Whether you choose to base your course on a coursebook or not, it is worthwhile to consider how you recognize a good one and why you might reject or criticize it; in other words, what are your primary criteria for evaluation? These criteria may be general (applicable to all language-teaching materials) or specific (assessing the suitability of a set of materials for a particular course or group of students) (Ur, 2012). Cunningsworth (1995) suggests a set of four criteria that might be employed to assess the quality and effectiveness of coursebooks:

1. They should correspond to the requirements of the students. They must align with the program's goals and objectives.

2. They should reflect the uses (current and prospective) that language learners will have. Students must be equipped with the skills necessary to use a language effectively for their own purposes.

3. They should consider the requirements of students as learners and facilitate their learning processes without imposing a rigid "method."

4. They should have a clear function as a learning support. They act as mediators between the target language and the learner, similar to teachers.

There are a variety of frameworks or checklists to be used in the evaluation of course materials in the existing literature. The ones that have been developed by Byrd (2001), CIEL (2000), Cunningsworth (1995), Garinger (2002), Harmer (2007), and McGrath (2002) are some of the most apparent sources of guidance for analyzing and evaluating materials. The degree to which these reflect the priorities and limitations that may be present in certain ELT teaching situations can vary. Those participating in the evaluation must make value determinations. Such value judgments will inevitably be subjective to some degree and reflect the viewpoints and priorities of those making them. They will likely be influenced by a variety of factors, including the following: learner and teacher expectations, methodological preferences, perceived needs of the learners, curriculum requirements, and personal preferences (Cunningsworh, 1995). Likewise, the framework Tomlinson (2014) proposes assesses the potential validity of the materials in relation to:

the learners' needs, goals, and pedagogical requirements; the teacher's skills, abilities, theories, and beliefs; and the reasoning behind the materials writer's presentation of the content and approach to teaching and learning.

Material evaluation is a crucial procedure that entails evaluating and selecting instructional materials, like coursebooks, for teaching and learning. Coursebook evaluation ensures that the chosen materials are appropriate, effective, and aligned with the learners' specific requirements and objectives. There are several ways to evaluate a coursebook. The evaluation of materials used in ELT and other educational contexts can be approached from two complementary perspectives: macro (external) and micro (internal) evaluation (McDonough et al., 2013). An external evaluation provides a brief summary of the materials from the outside (cover, introduction, table of contents), followed by a more thorough internal evaluation, which is a more detailed investigation into the coursebook. Both of these types of evaluations serve the purpose of ensuring the efficacy, appropriateness, and alignment of coursebooks with the objectives of language instruction.

Another way of conducting a coursebook evaluation proposed by Cunningsworth (1995) is divided into three: pre-use evaluation, in-use evaluation, and post-use evaluation. Tomlinson (1998) defines coursebook evaluation as the systematic assessment of the worth of materials in relation to the objectives of the students who will use them. Evaluation can be pre-used and therefore focused on predictions of potential value. It can be while-in-use and, as a result, can be centered on awareness and description of what the learners are actually doing while using the materials. It has been suggested that pre-use evaluation can facilitate the selection of coursebooks by providing an impression (Tomlinson, 2003). Pre-use focuses on rapidly examining the book's aim, level, skills, activities, themes, length and organization of units, and intended audience (Huong, 2018). This type of evaluation seems subjective and unreliable, yet it provides a general judgment about its potential suitability. In-use evaluation, on the other hand, enables users to make effective judgments about the text book while using it. According to Ellis (1997), the in-use stage establishes if it is worthwhile to use the materials again, which activities are beneficial and which are not, and how to adapt the materials to make them more effective in the future. Finally, post-use evaluation can contribute to the actual validity of the textbook for the users and future usage in terms of short-term impacts like motivation, quick learning, and the learner's achievability, as well as long-term effects such as durable learning and application

(Huong, 2018). This type of evaluation seems to be useful for assessing the strengths and limitations of coursebook usage (Ur, 1996).

Tomlinson (2003) argues that despite the fact that coursebooks produced by experts and professionals are good in terms of organization and design, they lack creativity and imagination. Despite the fact that such frameworks frequently serve a useful purpose in guiding the selection of materials, one of the major issues with their application is that they typically involve making broad, impressionistic judgments about the materials rather than examining what the materials contain in depth (Littlejohn, 2011). From this point of view, the activities and questions in the ELT coursebooks should be designed and selected carefully in order for students to learn the language and be able to use it authentically outside the classroom environment.

2.2. Teaching Listening

Nunan (2002) says, “Listening is the Cinderella skill in second language learning. All too often, it has been overlooked by its elder sister - speaking.” (p.238). It has been claimed that more than 50 percent of the time allocated by students to engage in activities related to a foreign language will be dedicated to listening skill (Nunan, 2002). Despite this, we often take listening for granted, and it is arguably the least understood and most neglected of the four language classroom skills (listening, speaking, reading, and writing) (Nation & Newton, 2009). Anderson and Lynch (1998), emphasizing the importance of listening, state that listening skills are equally as essential as speaking skills because people cannot communicate face-to-face unless both types of skills are developed simultaneously.

Until recently, applied linguists neglected the nature of listening in language learning and frequently held the belief that listening skills might be learned by exposure but weren't actually taught (Richards & Renandya, 2002). Foreign languages were previously learned through reading and translation, but research in linguistics, sociology, and anthropology in the latter half of the 20th century revealed that listening is the most important initial skill, as speaking necessitates listening (Wilson, 2008).

Language learning skills have been classified as being receptive (reading and listening) and productive (speaking and writing), and receptive skills are often presumed to be passive rather than active. It has been believed not to be tangible in the same way that

speaking and writing are, and a listening text cannot be altered as readily as a reading text (Field, 2008). However, these assumptions have been replaced over the past 50 years with the help of new approaches to teaching listening. As a result of quick globalization and developments in communication and technology, English speakers have been exposed to different uses of spoken English. This inevitable transformation has led scholars to focus more on listening skills and how to teach them because decoding a message (i.e., listening) requires active participation in the conversation between the participants (Broughton et al., 1993).

For many years, listening was underestimated in language teaching, and it was not acknowledged as a skill on its own until the communicative language teaching (CLT) era (Marlina, 2017). In the 1960s, oral language skills started to gain importance, and in the 1980s, listening became popular again with Krashen's (1982) ideas about comprehensible input, which emphasize the significance of comprehension and intelligible material in stimulating language acquisition (Flowerdew & Miller, 2005). According to Krashen (1985; 2014), the input hypothesis proposes the essential notion that the only way by which a person can acquire a second language is through the comprehension of messages or the reception of information that is intelligible to the learner. Then, with James Asher's Total Physical Response (1988), a second language was believed to be learned most effectively when the pressure to produce it was taken off the learner. Studies in the field of first language learning also shed light on the research on second language learning in the 1980s. A number of studies in the 1990s revealed the challenges language learners face while dealing with comprehension issues and drawing conclusions, in addition to linguistic and schematic considerations (Hinkel, 2006). For example, Brown (1990) was one of the scholars to show how important it is for students to develop their listening and speaking abilities as well as their literacy skills in school.

There are numerous types of listening, which can be categorized based on a variety of factors, including the reason for listening, the listener's role, and the sort of text being listened to (Richards & Renandya, 2002). These variables are combined in numerous combinations, each of which will necessarily require a distinct listening strategy from the listener. In order to be able to teach listening appropriately, the nature of listening needs to be understood first.

2.2.1. Listening processing models

One of the most distinguished approaches to teaching listening is the modeling of bottom-up and top-down processes, which is derived from a psycholinguistic perspective (Rost, 2015). According to the bottom-up approach, understanding occurs when incoming linguistic input is decoded, identified, and understood (Marlina, 2017). It mainly focuses on improving learners' knowledge of sounds, words, sentences, and clauses. According to this concept, the various forms of knowledge required in the listening process are applied sequentially and in a hierarchical manner (Flowerdew & Miller, 2005). Whereas in top-down processing, learners are actively involved in listening comprehension based on their expectations, inferences, intentions, and other relevant prior knowledge (Richards & Renandya, 2002). Top-down models prioritize the utilization of prior information in the comprehension of a text, as opposed to depending solely on the analysis of individual phonetic and lexical units (Flowerdew & Miller, 2005).

In the actual world, bottom-up and top-down processing typically occur simultaneously (Richards, 2008). The degree to which one dominates over the other depends on the listener's familiarity with the topic and content of a text, the density of information in a text, the text type, and the listener's purpose for listening. When we combine these two forms of processing, we see listening as a collection of subskills rather than a single skill (Nation & Newton, 2009). Considering that listening involves both bottom-up and top-down processing, a paradigm that combines the two is necessary (Flowerdew & Miller, 2005). The so-called interactive model, devised most notably by Rumelhart (1975), demonstrates this. From a pedagogical standpoint, this allows for the possibility of a model that is sensitive to both individual learning styles and group requirements (Flowerdew & Miller, 2005). Similarly, Nunan suggests that both bottom-up and top-down strategies are necessary in teaching listening skills (2002). He supports the idea that teaching learners to use their prior knowledge to comprehend what they hear (top-down) is just as crucial as teaching them the ability to distinguish between minimal pairings (bottom-up). Individuals may favor top-down processing, whereas groups may prioritize bottom-up procedures. Beginners require fundamental decoding skills, while advanced students may concentrate on top-down skills. Even proficient students must practice bottom-up features (Flowerdew & Miller, 2005). Students can prepare background knowledge and ideas, consider the essential vocabulary and grammar, organize the

discourse, or plan their conversational exchanges by using both types of listening processing (Hinkel, 2018).

2.2.2. Role of listener

Another most common distinction in instructional listening is between "product" and "process." In the 1980s, the focus was on the final product in all skills-based language teaching, not just in teaching listening. However, from the 1990s and onwards, the focus has been shifted to the learning process, and learners as language processors have received a lot more attention (McDonough et al., 2013). From this perspective, the processing of listening has been the center of focus, and thus, some writers, such as Brown and Yule (1983), make a functional distinction between "transactional" and "interactional" purposes. Transactional listening can be defined as a one-way flow of information, as in listening to a broadcast, whereas interactional listening includes two-way communication (Brown & Yule, 1983). Traditional listening views focus on one-way information transmission, as seen in older materials. When the listener is required to take part in the interaction, it is known as reciprocal listening, whereas non-reciprocal listening happens when the listener has no option of answering back, clarifying, understanding, or checking (Richards & Renandya, 2002).

2.2.3. Kinds of listening

Just like the reading skill, there are two main kinds of listening practice: intensive and extensive. Intensive listening differs from extensive listening in that students listen specifically to improve their listening skills and to study the English language's pronunciation (Harmer, 2007). It usually takes place in classrooms or language laboratories and typically occurs when teachers are present to guide students through any listening difficulties and direct them to areas of interest. Unlike intensive listening, which focuses on just one or two specific aspects in a much more controlled manner, extensive listening involves the freer, more general listening to natural English without the teacher’s direct guidance (Broughton et al., 1993). Extensive refers to listening that students frequently engage in outside of the classroom for pleasure or other purposes (Harmer, 2007). It is a method of learning a language by listening to a large volume of information without

focusing on every detail, aiming to improve overall comprehension and fluency rather than individual words.

Recently, some researchers have been categorizing different kinds of listening practices into many different categories. According to Rost (2015), for example, listening practice is classified into five different kinds: intensive, selective, interactive, extensive, and autonomous. Each type of listening provides a different kind of input to be used in teaching based on the learners' proficiency level and the learning objectives of the lesson. Nonetheless, all these types of listening practice are known to be helpful for language learning and acquisition, and a particular combination of these types is likely to be most appropriate in a specific teaching context (Rost, 2015).

2.2.4. Listening skills and strategies

The teaching of listening involves various skills, including key words, inferences, topics, main ideas, and details (Richards, 2015). These skills are reclassified by Brown (2003) into micro skills, which involve linguistic processing at the bottom-up, and macro skills, which focus on larger elements in a top-down approach. Micro skills include distinguishing English sounds, recognizing reduced forms of words, and following speech. Macro skills involve recognizing utterances' communicative function, using context information, inferring meanings, using listening strategies, and utilizing real-world knowledge (Brown, 2003).

In the ELT context, lessons are shaped around the types of listening instruction, and teachers can include various listening practice activities in the classroom in order to help students develop their listening skills, find the appropriate material to listen to, and listen in various ways for various purposes (Gu, 2018). Goh and Vandergrift (2012) propose conceptualizing listening skills as fundamental abilities that listeners need to interact with listening input in a manner appropriate to their communicative goals. A person may employ one or more of these six fundamental listening skills, depending on the length of the input and the reason for listening. These include: listening for details, listening for global understanding, listening for main ideas, listening and inferring, listening and predicting, and listening selectively. These are the skills employed by competent L1 and L2 listeners in a variety of listening contexts (Goh & Vandergrift, 2012). Therefore, they

should not be separated from the content instruction but rather integrated into the ongoing structure of the lesson so that students can observe how the strategies contribute to the development of effective learning.

Numerous theorists have attempted to characterize listening comprehension in terms of the taxonomies of subskills that underlie the process as a complex, multidimensional process (Buck, 2001). The utilization of various strategies by listeners can also play a significant role in facilitating successful listening. Listeners can develop efficient strategies for approaching and managing their listening tasks. These exercises aim to actively engage listeners in the listening process (Richards, 2008). Buck (2001:104) identifies two types of listening strategies: cognitive strategies, which involve mental activities for comprehending and storing input, and metacognitive strategies, which involve conscious or unconscious mental activities for managing cognitive strategies. These strategies help individuals manage their knowledge, resources, and constraints in language tasks, ultimately improving their language use (Richards, 2008). Listening skills are linked to various purposes, and strategies can be employed to improve or achieve these skills. Phonological awareness skills can be used for discriminative purposes, whereas critical listening strategies involve loaded words (Adelmann, 2012).

Researchers have also been drawn to successful second language listeners' metacognitive and cognitive techniques (e.g., Rost & Ross, 1991; Vandergrift, 1999, 2004). The results of these studies brought about new listening strategies to improve cognitive and metacognitive skills in language learners. Therefore, modern second language listening pedagogy involves teaching and modeling metacognitive skills (i.e., critical thinking) in order to teach listening effectively (Hinkel, 2006). Moreover, experts study listening comprehension as a skill by dividing it into sub-skills like perception skills, language skills, knowledge of the world, dealing with information, and interacting with a speaker (White, 1998). Good listeners are described as people who are capable of using a variety of sub-skills at once while listening and choosing which sub-skill to use according to the kind of text they are listening to or the reasons for listening to it.

2.2.5. Purpose of listening

Activities that require listening should also provide an opportunity to practice fundamental abilities, including listening for specifics, listening for overall comprehension, listening for major concepts, listening and drawing conclusions, listening and making predictions, and listening selectively (Goh & Vandergrift, 2012). With the listening activities provided for educational purposes, we want our students to demonstrate either understanding or a lack of understanding (Wilson, 2008). Subsequently, their responses could include production (i.e., note-taking, correcting errors, etc.) or recognition (i.e., true-false, multiple choice, etc.). With recognition responses, students have less to do and are therefore less distracted from listening, whereas productive responses necessitate other skills in addition to listening (Wilson, 2008). Considering the different types of listening activities and their possible responses, a categorization regarding the purpose of listening needed to occur.

Wilson (2008) categorizes the purposes of day-to-day listening into four categories: listening for the gist, listening for specific information, listening in detail, and inferential listening. Listening for the gist involves understanding the overall message, who is speaking, why, and how successfully they communicate their argument (Wilson, 2008). Listening for specific information relates to situations where we simply need to comprehend a specific section, such as selectively listening to news about one delayed train and focusing on the one we want to catch by ignoring everything else. Listening in detail, on the other hand, refers to the type of listening we do when, for example, we need to discover errors or determine differences between one passage and another. Lastly, we engage in inferential listening when we desire to understand the speaker's emotional state.

From the ELT perspective, a slightly different type of categorization needed to be made. First of all, students may be asked to listen for the first time to get the main idea. Therefore, listening for the gist should be included in the coding scheme for this particular research. Additionally, there is selective listening, in which the aim for students is to listen for specific information (Rost, 1990). There are also some situations in which students are required to listen in detail when they do not know precisely what information will assist them in completing the task (Wilson, 2008). However, this section would be better served if divided into two sub-sections: listen for literal understanding and inferential listening.

This is mainly because some comprehension check questions aim at students' literal understanding, whereas others may require students to listen in detail and make inferences.

2.2.6. Types of listening activities

In the 1980s and 1990s, listening practice research focused on categorizing and exploring listener styles (Coburn & Edge, 2007). According to Wolvin and Coakley's taxonomy (1996), for example, listening is defined as the process of recognizing and assigning meaning to aural and visual stimuli. A three-level hierarchy of five basic listening purposes is shown in the taxonomy. They categorize it into discriminative and comprehensive types, which form the roots of their 'listening tree' (Adelmann, 2012). The branches correspond to individual preferences or situations, with therapeutic, critical, and appreciative types representing different types of listening. A similar taxonomy based on listening technique or preference is described by Wolff et al. (1983). The authors categorize listening styles into four types: discriminative, evaluative, appreciative, and empathetic. Both of these models have the potential to be valuable in examining our own inclination towards a specific style (Coburn & Edge, 2007).

Within the scope of this particular study, five main types of listening, which are mostly referred to in the field of ELT, have been mentioned (i.e., discriminative, comprehensive, critical, evaluative, and appreciative) (see Table 2. 1.). Discriminative listening involves recognizing the differences in sounds, stress, rhythm, and intonation in spoken language. It is important for developing phonemic awareness, which is the ability to distinguish between different sounds in a language (Wolvin & Coakley, 1996). Comprehensive listening involves understanding the meaning of spoken language. Comprehensive listening skills involve understanding the main ideas, supporting details, and implicit meaning in spoken language (Wolvin & Coakley, 1996). Critical listening involves evaluating the message, identifying biases, and assessing the credibility of the speaker. More specifically, it entails actively engaging with the language to understand the intended meaning, judge the speaker's tone and purpose, and critically examine the information being communicated. It goes beyond merely understanding the words being spoken. Critical listening skills involve analyzing arguments, evaluating evidence, and identifying logical fallacies. In the context of evaluative listening, the listener actively participates in the communication process by critically assessing the speaker's arguments,

evidence, and reasoning. This method is frequently employed in contexts that require the application of critical thinking and analysis. Appreciative listening refers to the process of listening to spoken language for pleasure, entertainment, or personal satisfaction. Unlike other types of listening, such as critical or evaluative listening, where the listener analyzes or judges the content, appreciative listening concentrates on the emotional or aesthetic experience of listening (Coburn & Edge, 2007).

These five types of listening skills are interrelated and develop over time with practice and exposure to authentic spoken language. ELT instructors often use a variety of listening activities and materials to help learners develop these skills. Regardless of the type of listening task the instructor chooses to emphasize, it is essential to keep in mind that listening is much more than comprehension. Listening as a means of actively manipulating learning input, i.e., awareness, perception, and attention to language form, is crucial for incorporating new forms and structures into existing language competence (Gu, 2018).

Table 2. 1. Types of listening activities

Type of Listening	**Description**
Discriminative	Listening to distinguish spoken language sounds, syllables, and intonation patterns
Comprehensive	Listening to understand the meaning of spoken language
Critical	Listening to evaluate and analyze the content of a message, assessing the credibility of the speaker and the validity of the message
Evaluative	Listening to analyze and judge the content, intent, and credibility of the speaker
Appreciative	Listening for enjoyment, entertainment, or personal fulfillment

2.2.7. Effective questions in listening

The term "thinking" can be described as a wide range of mental activities that require abilities beyond the concepts of factual knowledge or memorization, such as understanding, applying, analyzing, evaluating, and creating (Lee, 2010). The significance of thinking in a language learning context is of vital importance, and in parallel, activities and questions used in the classroom need to be encouraging for the active cognitive processing of students. As Wilson states (2008):

Ever since Socrates engaged his Athenian students in question-and-response routines 2,500 years ago, questioning has been a staple of education in modern democracies.

Even though teachers use questions a lot in the classroom environment, these tend to be lower-level and memory-based questions (Almeida, 2020). Gould (1923) suggested that teachers should ask students questions to encourage reflective thinking, help them remember concepts and generate hypotheses, engage in autonomous thought, and participate in class debates. Likewise, Kuhn and Dean (2005) state that, as a means of becoming autonomous thinkers and learners, kids should also develop abilities in argumentation and inquiry.

According to studies, teachers pose numerous inquiries in the classroom (Olivero, 2020). Teachers may ask as many as 400 questions per day in the classroom, with 60 to 80 percent of the inquiries requiring only recall (Tienken et al., 2010). Consequently, of the greater than 60,000 queries posed annually in a classroom, approximately 12,000 encourage students to engage in higher-order thinking. These studies highlighted the importance of understanding the distinctions between various categories of questions (Wilson, 2008). Higher-order questions allow students to think critically and creatively. Redfield and Rousseau (1981) stated that this type of questioning stimulates active participation and facilitates learning. Additionally, it triggers prior knowledge and allows students to apply and synthesize new knowledge. Lower-order questions, in contrast, ask students for very fundamental factual information and typically have only one correct response (Wilson, 2008). Teachers are expected to ask higher-level questions for higher-level learning, but most studies indicate that teachers generally ask lower-level questions. This is a skill that needs to be researched and developed.

Research shows that engaging students cognitively in an interactive way improves the quality of their learning (Llinares et al., 2012). A study about effective questioning in content and language integrated learning (CLIL) classrooms conducted by Caravaca (2019) revealed that proposing teachers use effective questioning techniques increased the cognitive and knowledge demands of their questions while at the same time increasing students' capability of answering these questions by improving their grammatical competence in English. Therefore, it has been proven to be essential to foster students' higher-order thinking skills in order to make them competent users of the target language.

According to a case study conducted by Raak (2018), 21 students between the ages of 10 and 11 were exposed to introductory questionnaires and classroom-based studies in order to develop their higher-order thinking skills by using authentic texts like newspaper articles. This study suggests that students tend to perform better in terms of using HOTS in the classroom once they are instructed about how to implement them.

Questions asked by teachers have a tendency to directly affect the learning process and learner habits because learners habitually mimic and copy their teachers' behaviors (Lortie, 1975). For that reason, questioning has critical educational roles and can be used for eliciting answers, guiding, scaffolding, and arousing curiosity (Kiss, 2017). Olivero (2020) states that it is important for teachers to use questioning as a strategy to promote critical thinking by encouraging higher-order thinking skills in language learning. It is also stated that the level of questions asked by the teacher in class has a significant impact on students' thinking levels.

2.3. Critical Thinking

Critical thinking is a form of reasoning that requires students to have good reasons for their decisions. Ennis (1985) defined it as reasonable, reflective thinking that involves thinking about a problem from several angles. Fisher (2011, p. 21) defined it as "a skilled and active interpretation and evaluation of observations, communications, information, and argumentation".

Since the 1990s, listening research has emphasized the importance of effective strategies for learners to improve their listening processes (Rost, 2016). The research suggests that better listeners make sustained progress by learning and implementing these strategies (e.g., Rost & Ross, 1991; Vandergrift, 1999). Recent studies have identified several aptitudes associated with successful listening proficiency, and metacognitive awareness has been an important factor in understanding difficulties during listening tasks (Goh & Hu, 2014). A strategic approach to learning, the metacognitive approach emphasizes metacognition, or language processing, as a form of critical thinking that counteracts instinctive reactive thinking. Critical thinking instruction aids listeners in monitoring comprehension, clarifying requests, and responding to input texts, enhancing situational and strategic understanding of approach problems (Duffy et al., 2010).

Critical thinking is an essential skill in language learning, as it helps learners process and understand new information more effectively. When learners engage in critical thinking, they are actively analyzing and evaluating information, identifying patterns, and making connections between different concepts. Focusing on thinking in the classroom environment is fundamental in the field of language learning because it promotes active cognitive processing, which leads to improved learning for students. Once the students are trained well enough to develop a critical attitude, they are able to answer questions and solve problems systematically yet flexibly (McGuinness, 1999). Questions that are included in the learning materials and also asked by the teachers in the classroom tend to foster higher-order thinking skills in students.

Critical thinking skills can help learners make connections between different concepts, which can lead to a deeper understanding of the language. When learners analyze language structures and vocabulary in context, they can improve their language proficiency. They also help learners understand and interpret different types of language, including spoken and written language. This can enhance learners' communication skills and enable them to communicate more effectively with others.

Additionally, critical thinking skills can help learners understand the cultural context of the language they are learning. By analyzing cultural practices, norms, and values, learners can gain a deeper understanding of the language and culture. Moreover, they can help learners identify and solve problems related to language learning. When learners encounter difficulties in understanding or using language, critical thinking can help them analyze the problem and find a solution. Overall, critical thinking is an essential skill in language learning, as it helps learners develop a deeper understanding of the language, communicate more effectively, and navigate cultural differences.

2.3.1. Lower-order thinking skills

Lower-order thinking skills (LOTS) refer to cognitive abilities that involve basic, rote, or memorized knowledge and require little to no analysis or synthesis. These skills are typically used to recall information or perform simple tasks, such as identifying or describing objects, repeating information, or recognizing patterns. These skills are important for foundational learning and are often taught early in a student's education.

However, higher-order thinking skills (HOTS), such as analysis, synthesis, evaluation, and creativity, are required for more complex problem-solving and critical thinking tasks. Therefore, educators are commonly advised to help students develop both LOTS and HOTS to ensure well-rounded cognitive development.

2.3.2. Higher-order thinking skills

While critical thinking is an element of higher-order thinking skills (HOTS), the latter encompass a more extensive array of cognitive capabilities, including metacognition, creative thinking, and problem-solving. HOTS are classified as analyzing, evaluating, and creating. Analyzing requires students to use their own judgment to begin analyzing what they have learned (Watson, 2020). It allows students to comprehend the underlying structure of knowledge and differentiate fact from opinion. Evaluating moves students away from relying solely on previously learned information and requires them to ascertain relationships between sources (Olivero, 2020). At the creation level, students are required to mentally assemble all the information they have been taught to be able to make a solid evaluation of the input.

Students have been exposed to traditional methods of language learning based on memorization via knowledge-based questions. Although the educational trend of the 21st century supports using critical thinking skills, many coursebooks lack activities favoring higher-order thinking skills (HOTS). These thinking skills are essential because they enable students to process the information critically and utilize it accordingly. Considering these factors, it is essential to incorporate higher-order thinking skills into the educational setting. Teachers should not ask questions that have already been answered, or it will be impossible to tell whether students arrived at the solution through higher cognitive processes or if they simply remembered a previously learned fact (Caravaca, 2019). Additionally, the coursebooks used in language learning environments need to include effective questions for learners to promote their higher-order thinking skills. One of the most essential educational functions of coursebook questions is to stimulate students' critical thinking and problem-solving skills, regardless of whether these questions are posed directly by teachers or published in textbooks (Jo & Bednarz, 2011).

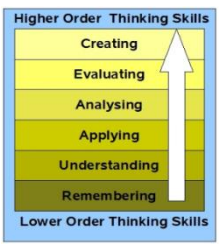
The HOTS embedded in ELT coursebooks may have a significant impact on the learning process during the course, especially when teachers heavily rely on tasks from the text. If teachers want students to achieve critical thinking in the classroom, some evidence should be found throughout the curriculum that teachers use to elicit higher-level thinking skills (Risner & Nicholson, 1996). This includes student learning objectives, classroom instruction, and all materials used by teachers to teach and collect feedback on whether students have learned what was taught in the lesson (Stiggins et al., 1989).

2.4. Bloom's Taxonomy Revised

Bloom's Taxonomy is one of the best-known taxonomies in education. It focuses on six levels of thinking that students practice while learning or acquiring knowledge. The cognitive domain is the first published part of the taxonomy, featured in the publication "Taxonomy of Educational Objectives: Handbook 1, the Cognitive Domain" (Bloom et al., 1956). The affective domain includes the manner in which we deal with emotions such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The psychomotor domain includes physical movement, coordination, and use of the motor-skill areas.

The cognitive domain (Bloom, 1956) involves the development of knowledge and intellectual abilities. It consists of six main categories: knowledge, comprehension, application, analysis, and synthesis. The categories progress from basic to complex, implying that one cannot master the higher levels until the lower ones are mastered. The three lower categories, including remembering, understanding, and applying, are defined as lower-order thinking skills, whereas the upper three categories in Bloom's revised taxonomy, consisting of analyzing, evaluating, and creating, are called higher-order thinking skills. Figure 2.1. shows the cognitive dimension of thinking skills in Bloom's revised taxonomy.

Figure 2. 1. Bloom's Revised Taxonomy adopted from Churches (2007)



Benjamin Bloom collaborated with a group of educational psychologists in 1956 to create a framework for categorizing educational goals. They concentrated on the levels of questions asked in different educational settings. This framework, Bloom's Taxonomy, mainly focuses on the verbs in questions and determines their level of complexity. Based on this taxonomy, Bloom, Englehart, Furst, Hill, and Krathwohl (1956) developed Bloom's Taxonomy of Educational Objectives, which introduces a framework for developing questions and identifying desired student behavior to be used in curriculum design and test construction (Bloom et al., 1965). The taxonomy is depicted as a pyramid, with lower-order thinking at the bottom and higher-order thinking at the top. It appears that the categories can be viewed as having varying degrees of cognitive and educational difficulty. In other words, the lower ones must ordinarily be mastered before the higher ones can occur.

In the 1990s, Anderson attempted to update the taxonomy with her colleagues related to the reflection of 21st century skills in education. In 2001, Anderson and Krathwohl revised Bloom's Taxonomy and named it "A Taxonomy for Teaching, Learning, and Assessment." The original number of categories remained the same, yet the names of the categories changed from nouns to verbs, and the order of the top two categories was reversed. Figure 2. 2. shows the old and new versions of Bloom's Taxonomy.

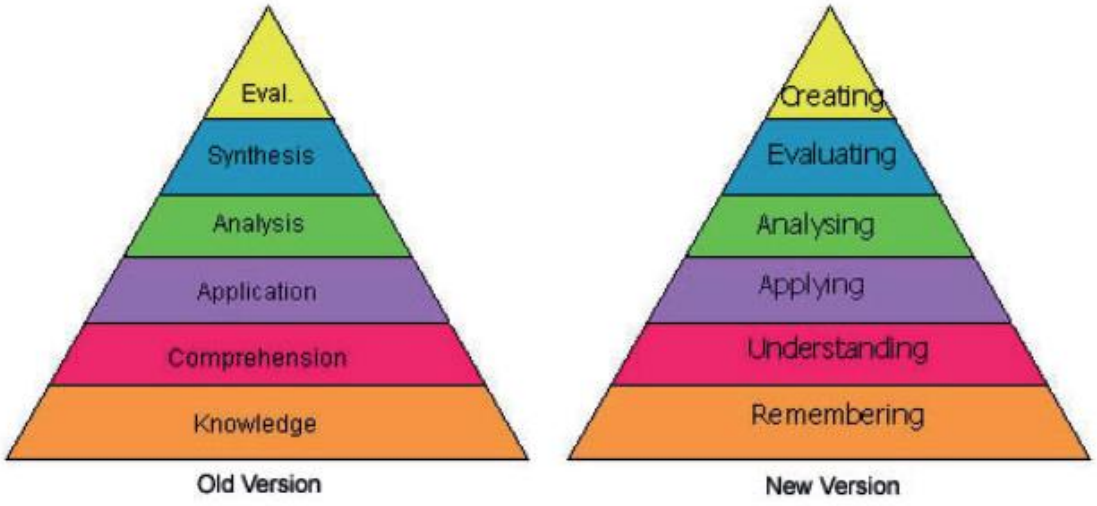
The new terms are introduced as (Anderson & Krathwohl, 2001, pp. 67-68):

- Remembering refers to the retrieval, recognition, and recall of relevant knowledge from long-term memory;
- Understanding is the process of deriving meaning from oral, written, and graphic messages by interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining;
- Applying refers to carrying out or employing a procedure by executing or implementing it;
- Analyzing is the process of dividing a material into constituent parts and determining how the parts relate to one another and to an overall structure or purpose by differentiating, organizing, and attributing;
- Evaluating is the process of making decisions based on criteria and standards by checking and critiquing;

- Creating is the process of combining elements to form a coherent or functional whole; reorganizing elements into a new pattern or structure by generating, planning, or producing.

Anderson and Krathwohl (2001) not only revised the taxonomy, but they also added a new dimension to it, which is called the knowledge dimension. They categorized the knowledge into four categories: factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge. The knowledge dimension demonstrates exactly where each cognitive dimension is used in the taxonomy. This change to the original taxonomy recognizes how important it is that content (which includes factual, conceptual, procedural, and metacognitive knowledge) and cognitive processes are linked (Hess et al., 2009).Therefore, this two-dimensional structure offers a better alignment to be used for educational purposes.

Figure 2. 2. Original Bloom vs. Revised Bloom's Taxonomy (Conklin, 2011)



2.5. Webb's Depth of Knowledge

Norman Webb created another educational framework, "Webb's Depth of Knowledge" (DOK), in 1997 and revised it in 1999. While Bloom's Taxonomy focused on educational objectives and student aims, Norman Webb's Depth of Knowledge (1997) framework described how students interact with the content (Olivero, 2020). This framework focuses on categorizing tasks based on the amount of thinking required to complete them. This framework is depicted in a circle with four levels, starting from the

lowest basic recall (DOK level 1) to the highest extended thinking (DOK level 4). These levels include recall and reproduction, skills and concepts, strategic thinking and reasoning, and extended thinking (as represented in Figure 2. 3.).

Webb and Wixson (2002) describe DOK levels as following:

- *Level 1* requires students to recall or locate facts from the text by using simple skills or abilities. Items need a basic understanding of the text with initial comprehension without analyzing or interpreting.

- *Level 2* requires covering the important concepts in the text, such as identifying the main idea, without more complex analysis. Students may need to apply the skills or concepts they have covered in *Level 1*.

- *Level 3* requires a deeper understanding of the text. Students might need to explain, generalize, or connect ideas. They are supposed to have an abstract understanding of the theme and make analytical judgments about the text by referring to it and to their prior knowledge.

- *Level 4* requires more complex reasoning, planning, developing, and comparing ideas by using multiple dimensions. Students need to think over an extended period of time, which supports their use of higher-order thinking.

Although Bloom's Revised Taxonomy and Webb's DOK seem to have been created for the same purposes—both focusing on the cognitive complexity of thoughts—their range and use are different. Bloom's Taxonomy classifies the cognitive skills required by the brain when confronted with a new task, therefore outlining the type of thought processes required to answer a question (Hess et al., 2009). The DOK model, on the other hand, relates more directly to the depth of content comprehension and range of a learning activity, which appear as the abilities necessary to complete the task from beginning to conclusion (e.g., planning, researching, and drawing conclusions).

Figure 2. 3. Webb's Depth of Knowledge (1997)

Webb's Depth of Knowledge

Categories	Definition	Examples of Action Words*
Recall	Student recalls facts, information, procedures, or definitions.	define; identify; locate; name; recall; recognize; sequence; tell
Basic Application of Skill/Concept	Student uses information, conceptual knowledge, and procedures.	apply; compare; comprehend; identify; describe; determine; infer; interpret; predict; summarize; use
Strategic Thinking	Student uses reasoning and develops a plan or sequence of steps; process has some complexity.	analyze; cite evidence; compare; contrast; draw conclusions; explain; generalize; infer; interpret; evaluate; recognize; summarize; support
Extended Thinking	Student conducts an investigation, needs time to think and process multiple conditions of the problem or task. (The item/task generally requires several days or weeks to complete.)	describe and illustrate; evaluate; examine and explain; analyze; synthesize

*Some action words (verbs) can be classified at different depth-of-knowledge levels depending on the context of the item and the complexity of the action.

2.6. Hess Cognitive Rigor Matrix

While it is undeniable that many of the components are essential for listening, there is no evidence to suggest that any of these taxonomies provide a comprehensive, unified description of the listening process. They are beneficial as a whole because they reveal what scholars in the field have come to believe is essential for listening comprehension (Buck, 2001).

Bloom's Taxonomy has been used for over 50 years, enabling educators to create lessons that develop thinking abilities across a broad range of cognitive complexity. Later, a group of educational researchers headed by Anderson and Krathwohl (2001) revised the taxonomy, whose idea of classifying the questions and activities according to their cognitive levels remains. However, Bloom's Taxonomy has limits for picking test questions and developing questioning tactics since it uses verbs to identify taxonomy levels; many verbs appear at several taxonomy levels and do not properly communicate the intended complexity implied by the taxonomy (Hess et al., 2009). This gap is filled by the new model of rigor and depth of knowledge (DOK). To this end, Hess and some other researchers suggested a new combination of Bloom's Revised Taxonomy and Webb's Depth of Knowledge, creating a cognitive rigor matrix that offers a comprehensive foundation for defining rigor and hence poses a wide variety of applications at all levels of curriculum development and delivery (Hess et al., 2009).

Karin Hess integrated Bloom's Taxonomy with Webb's Depth of Knowledge in 2005 and formed the Cognitive Rigor Matrix. The CRM is a two-dimensional framework that includes Webb's Depth of Knowledge (DOK) on one axis and the cognitive dimension of the updated Bloom's Taxonomy (Anderson and Krathwohl, 2001) on the other (Hess et al., 2009). It provides guidance for educators to better understand cognitive rigor and utilize it in the classroom environment. By using focused questions and linguistic exercises, this tool aims to encourage and improve higher-order thinking and inquiry (Simpson et al., 2014). It is beneficial not only for the lesson designers but also for the test developers when writing test items and creating performance tasks. For this study, the Hess Cognitive Rigor Matrix (see Figure 2. 4.) will be applied to find out the type of thinking that has been used in the listening activities of a grade 8 MoNE English coursebook.

Figure 2. 4. Hess Cognitive Rigor Matrix Reading – Listening CRM (Hess, 2009)

TOOL 1

HESS COGNITIVE RIGOR MATRIX | READING-LISTENING CRM

Integrating Depth-of-Knowledge Levels with Bloom's Cognitive Process Dimensions

Revised Bloom's Taxonomy	DOK Level 1 Recall and Reproduction	DOK Level 2 Skills and Concepts	DOK Level 3 Strategic Thinking or Reasoning	DOK Level 4 Extended Thinking
Remember Retrieve knowledge from long-term memory, recognize, recall, locate, identify	o Recall, recognize, or locate basic facts, terms, details, events, or ideas explicit in texts o Read words orally in connected text with fluency and accuracy	Use these Hess CRM curricular examples with most close reading or listening assignments or assessments in any content area.		
Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare-contrast, match like ideas, explain, construct models	o Identify or describe literary elements (characters, setting, sequence, etc.) o Select appropriate words when intended meaning or definition is clearly evident o Describe or explain who, what, where, when, or how o Define or describe facts, details, terms, principles o Write simple sentences	o Specify, explain, show relationships; explain why (e.g., cause–effect) o Give non examples or examples o Summarize results, concepts, ideas o Make basic inferences or logical predictions from data or texts o Identify main ideas or accurate generalizations of texts o Locate information to support explicit-implicit central ideas	o Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference) o Identify or make inferences about explicit or implicit themes o Describe how word choice, point of view, or bias may affect the readers' interpretation of a text o Write multi paragraph composition for specific purpose, focus, voice, tone, and audience	o Explain how concepts or ideas specifically relate to other content domains (e.g., social, political, historical) or concepts o Develop generalizations of the results obtained or strategies used and apply them to new problem-based situations
Apply Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task	o Use language structure (pre-, or suffix) or word relationships (synonym or antonym) to determine meaning of words o Apply rules or resources to edit spelling, grammar, punctuation, conventions, word use o Apply basic formats for documenting sources	o Use context to identify the meaning of words or phrases o Obtain and interpret information using text features o Develop a text that may be limited to one paragraph o Apply simple organizational structures (paragraph, sentence types) in writing	o Apply a concept in a new context o Revise final draft for meaning or progression of ideas o Apply internal consistency of text organization and structure to composing a full composition o Apply word choice, point of view, style to impact readers' or viewers' interpretation of a text	o Illustrate how multiple themes (historical, geographic, social, artistic, literary) may be interrelated o Select or devise an approach among many alternatives to research a novel problem
Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	o Identify whether specific information is contained in graphic representations (e.g., map, chart, table, graph, T-chart, diagram) or text features (e.g., headings, subheadings, captions) o Decide which text structure is appropriate to audience and purpose	o Categorize or compare literary elements, terms, facts or details, events o Identify use of literary devices o Analyze format, organization, and internal text structure (signal words, transitions, semantic cues) of different texts o Distinguish relevant-irrelevant information; fact or opinion o Identify characteristic text features; distinguish between texts, genres	o Analyze information within data sets or texts o Analyze interrelationships among concepts, issues, problems o Analyze or interpret author's craft (literary devices, viewpoint, or potential bias) to create or critique a text o Use reasoning, planning, and evidence to support inferences	o Analyze multiple sources of evidence, or multiple works by the same author, or across genres, time periods, themes o Analyze complex or abstract themes, perspectives, concepts o Gather, analyze, and organize multiple information sources o Analyze discourse styles
Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique	"UG"—unsubstantiated generalizations = stating an opinion without providing any support for it!		o Cite evidence and develop a logical argument for conjectures o Describe, compare, and contrast solution methods o Verify reasonableness of results o Justify or critique conclusions drawn	o Evaluate relevancy, accuracy, and completeness of information from multiple sources o Apply understanding in a novel way, provide argument or justification for the application
Create Reorganize elements into new patterns or structures, generate, hypothesize, design, plan, produce	o Brainstorm ideas, concepts, problems, or perspectives related to a topic, principle, or concept	o Generate conjectures or hypotheses based on observations or prior knowledge and experience	o Synthesize information within one source or text o Develop a complex model for a given situation o Develop an alternative solution	o Synthesize information across multiple sources or texts o Articulate a new voice, alternate theme, new knowledge or perspective

2.7. Review of Related Studies

Extensive research has been conducted to assess the quality of coursebooks as a whole and ELT coursebooks in particular, with regard to language and design (Yazcı & Hayta, 2021), as well as the viewpoints of instructors and learners (Arıkan, 2008). Educational research has been preoccupied with determining the extent to which activities facilitate higher-order thinking and the cognitive levels of the questions utilized in the classroom (Demir, 2008; Fischer et al., 2011; Ilhan et al., 2020; Ivie, 1998; Kang, 1999; Ollmann, 1996; Polly, 2011; Stiggins et al., 1989; Zawilinski, 2009).

A considerable body of research has been devoted to the examination and taxonomical analysis of questions found in English as a Language (ELT) coursebooks and examinations that specifically target higher-order thinking skills (e.g., Ahmad Seif, 2012; Assaly & Smadi, 2015; Freahat & Smadi, 2014; Goktepe, 2015; Hoeppel, 1980; Ilham et al., 2020; Polly, 2011; Mahmood et al., 2020; Mrah, 2017; Qasrawi & BeniAbdelrahman, 2020; Kazempourfard & Razmjoo, 2012; Riazi & Mosa, 2010). However, a considerable number of these studies combine the knowledge and cognitive dimensions (i.e., Webb's Depth of Knowledge and Bloom's Revised Taxonomy) in a single investigation (i.e., Lopez & Whittington, 2001; Olivero, 2020; Renandya, 2019; Sydoruk, 2018).

During the literature review, it was determined that the majority of these studies evaluating ELT materials have concentrated on reading questions. Moreover, these research papers typically assess whether or not the reading questions encourage higher-order thinking skills through an analysis of the questions themselves. In the realm of ELT research, the utilization of listening skills has been rather limited. Several studies have examined the cognitive awareness and listening anxiety of English as a Foreign Language (EFL) learners in the context of analyzing listening skills in coursebooks (i.e., Ahmed et al., 2015; Eken & Dilidüzgün, 2014; Febrina et al., 2019; Haghani & Soori, 2015; Karalık, 2023; Sarısoy, 2023; Shang, 2005). Nevertheless, a research gap exists regarding the investigation of listening questions in the ELT context, and therefore, a more systematic and theoretical analysis is required from both cognitive and knowledge perspectives.

Many studies have found that most questions in the classroom have lower cognitive load levels (i.e., Barba & Cardinale, 1991; Zerk, 2001). For instance, in the Turkish context a study was conducted in order to assess the ELT coursebooks used in primary and

secondary schools with regard to teaching thinking skills (Demir, 2008). To find out if there is a relationship between the coursebooks and the thinking skills objectives of the national curriculum, 120 English teachers who were using these books were interviewed. The findings demonstrated the critical and pressing need for thinking skills improvements in these specific coursebooks.

An additional study was undertaken in Türkiye with the objective of assessing the conformity of English coursebooks utilized at the elementary and secondary levels with the proposed objectives of the national curriculum pertaining to thinking skills. As stated by Demir (2008), the findings of this research indicate that the English coursebooks utilized in elementary schools (grades 4, 5, 6, 7, and 8) fail to capture the intended learning outcomes and anticipated student conduct with respect to critical thinking abilities.

Ulum (2016) conducted a study in which the reading comprehension questions from a coursebook called Q: Skills for Success in Reading and Writing were analyzed in terms of their content using Bloom's Taxonomy. As per Bloom's Taxonomy, the examined textbook did not possess the higher-level cognitive skills. In a similar vein, a study employing Bloom's Revised Taxonomy to analyze reading questions from an ELT coursebook (Pathway to English) found that the cognitive learning domain variation found in the reading question was still uneven and needed additional additions in the higher-order thinking domain (Maharani, 2019).

In an early study, Hoeppel (1980) used Bloom's Taxonomy to classify the questions from reading skills development books in order to see whether there was a substantial difference between the cognitive levels. Of the 555 questions that were chosen at random, 99% fell into one of the two lowest categories (knowledge or comprehension). The questions in the coursebooks under investigation provided very little opportunity for higher-order thinking.

A study done by Mrah (2017) examined the effectiveness of EFL coursebooks in Morocco in fostering critical thinking and problem-solving among learners. Content analysis was used to assess the questions addressed in reading comprehension tasks. Results showed that the textbooks do not effectively enable learners to be autonomous lifelong critical thinkers. The study suggests a reconsideration of EFL textbooks in Moroccan high schools and suggests ways to promote these skills in future coursebooks.

Santos (1968) conducted a study to determine how much reading comprehension is prompted by the reading questions in seven basal readers that the Philippine Board on Textbooks has recommended be used to teach reading to students in grades three through six in all public elementary schools in the country. Based on the findings, it was discovered that the readers consisted of a high proportion of memory questions, which were categorized as LOTS questions, and a minority of reading tasks that required more complex cognitive processes.

On the other hand, another study about using Bloom's Taxonomy to evaluate the cognitive levels of questions in coursebooks (Asslay & Smadi, 2015) indicated that the percentage of questions emphasizing higher-order thinking skills was in parallel with the requirements of the curriculum. This is because the curriculum does not require critical thinking by nature. Rather, it focused on exam skills that were content with lower-level memory or knowledge-based questions. Nevertheless, the fact that activities, materials, and questions used in the learning environment lead to better critical thinking maintains its importance in ELT.

Another study focusing on the thinking levels included in Christian publishers' elementary reading textbooks was done by Lee (2010). For this study, 515 questions from two major Christian school publishers (A Beka Book and Bob Jones University Press) were chosen randomly and classified according to Bloom's Revised Taxonomy, resulting in no significant difference between LOTS and HOTS. It was suggested by the researcher that because the questions in coursebooks may range widely in difficulty, it is necessary to carefully review each coursebook to make sure that lower and higher level thinking are accurately documented.

In a research study evaluating the questions of two ESP coursebooks (English for the Students of Sciences and English for the Students of Engineering) based on Bloom's Revised Taxonomy of Cognitive Learning Domain (Zareian et al., 2015), the results showed that most of the questions were aligned with the lower-level categories (remembering, understanding, applying), whereas a small percentage of questions belonged to the higher-level categories (analyzing, evaluating, creating), according to the taxonomy.

In some rare cases, it has been proven by some researchers that questions promoting higher-order thinking skills appear more frequently than those supporting lower-order thinking skills. For instance, the same kind of study analyzed reading comprehension questions in a coursebook based on Bloom's Taxonomy on higher-order thinking skills (Febrina et al., 2019). The study used qualitative methods and content analysis to analyze reading comprehension tasks and found that higher order thinking skills (HOTS) were the most dominant level, accounting for 68.8% of the total, while lower order thinking skills (LOTS) were 33.4%.

A quantitative-qualitative content analysis study was conducted to compare the listening and reading tests of IELTS and TOEFL using Bloom's Revised Taxonomy. The findings revealed that IELTS listening exam questions primarily assessed the ability to comprehend and recall factual information. In contrast, TOEFL listening test questions emphasized the capacity to analyze, comprehend, and recall factual knowledge (Baghaei et al., 2019). Furthermore, the data revealed that IELTS listening assessments placed a greater emphasis on lower-order thinking abilities in comparison to their TOEFL counterparts.

Even though there has been research on evaluating and analyzing ELT coursebooks in terms of cognitive domains, the results are not good enough because not many studies have used Hess' Cognitive Rigor Matrix, which is a mix of Bloom's Taxonomy and Webb's Depth of Knowledge. One of the foremost studies in ELT coursebook evaluation using Hess' Cognitive Rigor Matrix was carried out by Olivero (2020). She analyzed 138 questions found in a 3rd grade reading textbook according to the matrix and found out that 61% of the questions promoted lower-level thinking and 39% promoted higher-level thinking.

Another recent study was carried out using Hess' Cognitive Rigor Matrix to analyze high-stakes standardized testing in the United States (the preliminary Scholastic Aptitude Test and the National Merit Scholarship Qualifying Test) (Esdale, 2021). Using subject-specific HCRMs, the study was able to determine that the level of advanced cognitive skills employed in the exam does not align with its intended objective of evaluating preparedness for college. According to the study, the PSAT/NMSQT math part should be improved to increase cognitive rigor. Local educational authorities should design more effective learning opportunities for students to practice higher-order thinking skills.

Renandya (2019) conducted research by comparing and analyzing the cognitive levels of questions available in two different ELT coursebooks used in Singapore. The cognitive rigor matrix, which combines two supreme taxonomy models: Bloom's Revised Taxonomy and Webb's Depth of Knowledge, was used in the analysis of 346 questions in total. The results of this study indicated that there was a good balance of questions requiring lower-order thinking skills (LOTS) and higher-order thinking skills (HOTS). However, not all cognitive levels were clearly differentiated, with an overemphasis on "understand" and "evaluate" questions while "remember" and "apply" questions were neglected (Renandya, 2019).

A study was conducted by Ahmed et al. (2015) to examine the position and significance of listening activities in a ninth-grade Punjab textbook. The findings revealed that while listening skills and activities are included, they are deemed less important than the development of speaking proficiency. An additional investigation investigated the listening comprehension components of the 2nd editions of Top Notch 2A and 2B. The findings of this study indicated that the allocation of listening comprehension components is not uniform (Hanghani & Soori, 2015). According to the findings of the research, the clarity of the illustrations and visualizations is insufficient to stimulate students' interest and motivation, the English proficiency of the students is not fully reflected in the audio, and the discussion segments fail to foster active participation from the students (Hanghani & Soori, 2015).

The existing literature appears to be deficient in conducting a thorough coursebook evaluation to analyze listening components in EFL coursebooks according to cognitive domains, specifically in terms of whether they foster higher-order thinking skills and critical thinking in learners. Thus, this particular study aims to fill in this niche in the field of materials development and evaluation in ELT with a particular focus on teaching listening.

CHAPTER III
METHODOLOGY

This chapter of the thesis gives detailed information about the methodology of the study. It includes the overall design of the research, research questions, and research context, along with a detailed description of the coursebook analyzed, the data analysis procedure, and the coding scheme in an explicit way.

3.1. Research Design

This coursebook evaluation study aims to determine how the LOTS and HOTS are represented in the listening exercises found in the 8th grade Ministry of National Education (MoNE) coursebook, *Mastermind*, along with detecting the cognitive levels and the knowledge dimensions of the questions according to Bloom's Taxonomy and Webb's Depth of Knowledge. It also aims to investigate the listening activities referring to the position of listening (i.e., primary, secondary), processing model (i.e., bottom-up, top-down), role of listener (i.e., reciprocal, non-reciprocal), type of listening (i.e., discriminative, comprehensive, critical, evaluative, appreciative), task type (i.e., brainstorming, chart filling, dialogue, gap filling, editing, info gap, opinion gap, role play, sequencing, true-false), and purpose of listening (i.e., listening for gist, listening for specific information, listening in detail, inferential listening).

To answer the research questions, a mixed-methods research methodology was used in this study. For the beginning, all the activities that include listening skill in the coursebook *Mastermind* were collected to be analyzed through content analysis (CA) (Krippendorff, 2019). CA is defined as a research approach for the analysis of the content of text data through the classification process of coding and detecting themes or patterns (Hsieh & Shannon, 2005). It is a useful research tool used to statistically manipulate large amounts of textual data and to find patterns or features in a systematic manner (Patton, 2002). In this qualitative part of the study, two different coding schemes were used. The first one, which was designed by the researcher to answer the first research question, aimed to classify the listening activities according to the aforementioned categories. For the second research question, Hess' Cognitive Rigor Matrix was utilized to be able to identify

the cognitive levels of the listening activities in the coursebook. For the quantitative parts of the study, the frequencies and percentages based on the coding schemes were calculated, so descriptive statistics were run. In general, the process of quantizing, initially proposed by Tashakkori and Teddlie in 1998, converts qualitative data into numerical codes that may be further analysed using statistical methods (Dörnyei, 2007).

The priority of the research plan was to better analyze the listening activities in terms of the cognitive levels they require learners to use, along with displaying which question types were used in what percentages. The first question was, "What are the types of listening activities included in the 8th grade MoNE Coursebook *Mastermind*?" In order to answer the first research question, all the listening tasks were taken out of the coursebook and classified according to their position of listening. There are 53 activities, some of which are in the primary position, whereas others are integrated with other skills such as speaking and reading. Afterwards, their task type, type of listening, and purpose of listening were classified along with the processing model and role of the listener (see Table 3. 1.).

The second research question was, "What is the extent to which cognitive levels of Bloom's Revised Taxonomy and knowledge dimensions of Webb's Depth of Knowledge are represented in listening activities in *Mastermind*?" For this question to be answered, all the questions that promote listening skills extracted from the coursebook were analyzed in terms of their cognitive levels by using the Hess Cognitive Rigor Matrix (HCRM) for Listening and Reading Skills. The measurement of each question provided by the HCRM's scale enabled the researcher to obtain a thematic comprehension of the *Mastermind* listening activities and then clearly present the document analysis's findings.

Hess' Cognitive Rigor Matrix (HCRM) was chosen to support the investigation of the answers to the research questions. This is essentially because it assists teachers in implementing what cognitive rigor might look like in the classroom and guides test developers in designing test items and performance tasks (Esdale, 2021). The content-specific descriptors in each of the HCRMs are used to classify and plan for various degrees of abstraction, i.e., an examination of the cognitive processing required by assessment questions and learning tasks (Hess, 2014).

3.2. Research Context

In the context of public or state schools, educational materials are often generated or endorsed by the respective ministry or department of education within a certain nation. These materials serve as a notable illustration of publishing practices that are either market-driven or tailored to meet educational requirements (Richards, 2015).

Without a doubt, the key to economic, political, and social advancement in today's society is the ability of Turkish individuals to communicate successfully on an international level, and English proficiency is a crucial element in this process (TTKB, 2018). Therefore, English is a compulsory course for Turkish students starting in the 2nd grade in every school in Türkiye. The Ministry of National Education (MoNE) develops an English curriculum and prepares and provides English materials to be used in the classrooms. *Mastermind* is an A2-level coursebook for 8th grade students in secondary schools and imam hatip secondary schools in Türkiye. At the present time, there are fundamentally two types of secondary schools in Türkiye: public and private. While private schools often employ a different curriculum for language instruction, both private and public institutions are required to utilize the coursebooks provided by the MoNE. The MoNE provides this coursebook to both types of schools for free, and the high school entrance exam (e.g., LGS) includes ten (10) English questions based on this curriculum (therefore, this coursebook). It is also vital to emphasize that this curriculum and all the suggested strategies that go along with it address millions of students and thousands of teachers. Therefore, a generic model of the English curriculum would not seem realistic. Rather, administrators and teachers are encouraged to follow this model when creating integrated resources that can be adapted to meet the needs of students in a variety of contexts with regard to school type, sociocultural outlook, and socioeconomic status (TTKB, 2018).

The ministry's objectives are to standardize the educational objectives of a large number of students and to provide them with materials to prepare for standardized examinations. The conceptual development of the materials occurs at the state or national level, typically within the curriculum division of the ministry of education, regardless of the nature of these objectives (Richards, 2015). According to the English language curriculum based on the general learning objectives of the Turkish National Education, an

action-oriented approach has been developed in consideration of the three CEFR characteristics, including learner autonomy, self-assessment, and appreciation for cultural diversity, because they contribute to communicative competence (CoE, 2001). Students are encouraged to engage in activities that require meaningful conversations between peers or between students and their instructor, such as creating a game in a group and then performing it with classmates. Rather than being addressed separately, the structural aspects of English are implicitly addressed as students develop their communication skills. Presented for each grade level are 10 sample courses organized around interrelated themes. The use of thematic units is supported by Hale and Cunningham (2011), who note that this strategy allows educators to present new information in a manner that is both relevant and interesting to students, encouraging them to build on prior knowledge while reviewing earlier material to improve their memory. In order to establish a connection between language acquisition and daily life, family, friends, animals, vacations, leisure activities, etc. have been emphasized in each unit (TTKB, 2018).

Additionally, the creation of a positive and helpful washback effect is stated as an essential component of the curriculum. Because students are purposefully encouraged to use a wide range of learning strategies, the curriculum restricts the excessive use of certain language learning methodologies (TTKB, 2018). In developing language and literacy skills, it also follows Cummins' (1984) paradigm, which promotes a transition from cognitively undemanding, context-embedded activities to cognitively demanding, context-embedded tasks, moving from familiar to unfamiliar concepts.

All things considered, the English curriculum prepared by the Ministry of Education claims to follow a communicative approach, which is supported by communicative functions to be taught such as accepting and refusing, apologizing, giving explanations and reasons, expressing likes and dislikes, making simple inquiries, expressing preferences, and so on. Considering the *Mastermind* coursebook was developed with these criteria in mind, analyzing the tasks in it in terms of cognitive and knowledge dimensions seemed necessary for this research.

3.2.1. Coursebook analyzed

The material chosen for this research is an English coursebook prepared and provided by the Turkish Ministry of Education (MoNE) for 8th-grade students, which refers to the senior year of middle school. In terms of English language teaching, the lesson hours and the materials used in the classroom differ in state and private schools in Türkiye. Private schools tend to have more lesson hours than state schools and use different curricula (such as the Cambridge Lower Secondary Curriculum) along with the national curriculum. This situation leads administrators and teachers in private schools to mostly choose exported ELT coursebooks to accomplish their learning objectives and meet learners' needs. On the other hand, the coursebook prepared by MoNE (in this context, it is *Mastermind*) is available and free of charge for all schools throughout the country. Moreover, the questions asked in the national entrance exam for high school are based on the national curriculum.

The coursebook selected for this study, *Mastermind*, is an A2 level English language coursebook for 8th grade students all around Türkiye. For this level, it is described as a thematic coursebook that consists of 10 units circling around 10 different themes: friendship, teen life, in the kitchen, on the phone, the internet, adventures, tourism, chores, science, and natural forces. The language taught in it is primarily based on listening and speaking skills, whereas the secondary focus is said to be on reading and writing. As the curriculum follows a communicative approach, the coursebook targets meaningful, situation-based learning. The functions and useful language units are claimed to be cyclically produced and interdependent (TTKB, 2018).

3.3. Data Analysis

The data consisted of all the questions appearing in the listening tasks in the 8th grade English coursebook, *Mastermind*. The coursebook has 10 separate units, including 53 listening activities. 31 of the activities were in the primary position of listening, whereas 22 of them were in the secondary position (integrated with other skills).

To be able to answer the first research question, all the listening activities were extracted from the coursebook and classified according to the categories specified in the

coding scheme (see Table 3. 1.). The second part of this research, which needed the questions to be analyzed in terms of their cognitive level, was done by using Hess' Cognitive Rigor Matrix, which was found to be the most appropriate tool for this study because this framework categorizes the questions as lower or higher order thinking levels with the help of specific descriptions of the words presented in the questions. Additionally, the combination of Bloom's Taxonomy and Webb's Depth of Knowledge enables educators and test developers to closely examine tasks and the rigor associated with those tasks (Olivero, 2020). This matrix provides different perspectives to analyze the questions according to their type and cognitive level. The frequency of HOTS was determined quantitatively by scanning listening tasks and counting the number of activities. The objective of the quantitative analysis was to determine if the number of these activities was sufficient to foster these skills.

In order to conduct a thorough study of the coursebook, the researcher collaborated with a consultant coder, who also served as the thesis supervisor. The consultant coder possesses extensive expertise in the areas of material evaluation, coursebook analysis, testing and evaluation, and listening comprehension. Prior to initiating the content analysis technique, two coders performed a sample coding session. In the beginning, they worked on the various forms of listening activities regarding the first research question. During the scheduled meeting sessions, they collectively established the categories of the coding scheme for the first research question. Afterwards, they identified each listening activity by placing them into correct categories.

For the second research question, the two coders discussed each cell of the Hess' Cognitive Rigor Matrix to provide clarity regarding the types of questions and activities that would be placed in each category. Basically, they analyzed the connection between Webb's DOK and Bloom's Taxonomy on the Cognitive Rigor Matrix. Likewise, for the sake of answering the second research question, they started coding independently and categorized the three listening questions found in Unit 1: Friendship by using the Sample Coding Template (see Table 3. 1.). All the sample questions found in Unit 1 were coded with 100 percent agreement after reviewing samples and then engaging in discussion.

The researcher and the consultant coder analyzed every single listening activity found in the coursebook and discussed the placement of each question in the proper cell of the HCRM for the first coding session. They had 90% initial direct agreement, which then

led to 100% agreement after using the consensus read-behind method. After this calibration session, the two coders met later and reviewed the questions a few more times. As each question was reviewed, one coder presented a categorization, and the second coder either agreed or disagreed with this categorization by describing Hess' Cognitive Rigor Matrix. When there was a disagreement, the coders used the double-rater read-behind procedure by infusing Webb's Alignment Training Manual with Facilitating the Consensus Process Tips. During the coding procedure, the following facilitation techniques were used (Webb et al., 2005):

1. Read each test question aloud before discussing it.

2. As you go through the test questions, actively solicit comments from all reviewers.

3. Use your printout to call on people who coded DOK differently from the coding of other members of the group, and ask them to explain why they coded the test question to the particular DOK level.

4. Once two reviewers have described how they have coded a test question differently, as a third reviewer to highlight the differences between the two interpretations.

5. Restate and summarize to reviewers your interpretation of what the reviewers have agreed on and what they have disagreed on.

6. If there is a difference in interpretation of the test question's terminology to a reviewer with experience in teaching that grade level with these standards, discern how the teacher might be interpreting the test question.

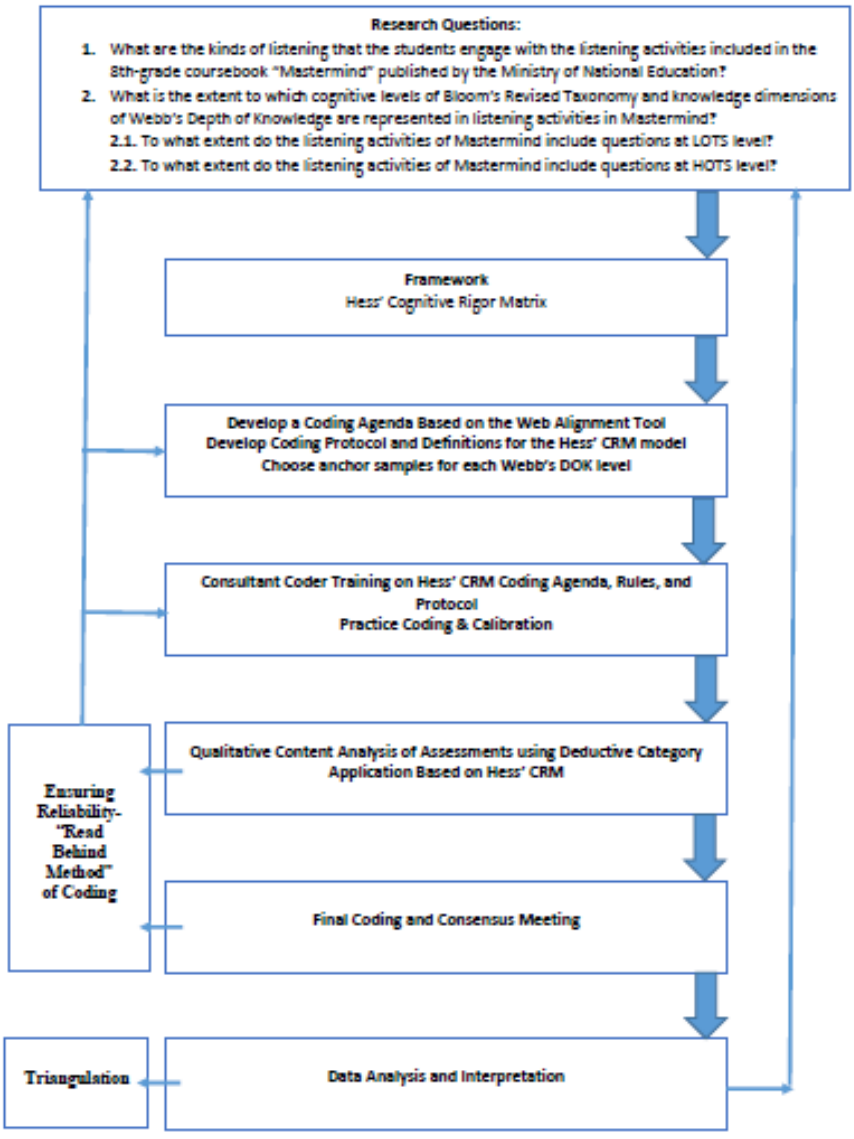
7. Ask if anyone, through other reviewers' explanations, now want to change his or her mind about their original coding.

8. If the viewpoints on the DOK level of a test question is divided, point to the most likely skills or content knowledge required in the test question, not the more extreme possibilities the test question might allow for.

9. As the facilitator, try not to dominate the consensus process. Even if you have strong feelings about the DOK level of a test question, wait to see if other reviewers highlight your point.

The data analysis process was founded on a careful, more concentrated rereading and review of the listening activities. The researcher examined the characteristics of each listening activity in *Mastermind*, checking with the consultant coder, in order to determine which higher-order thinking abilities are embedded throughout the coursebook. Each cell of the CRM was investigated, with emphasis on and discussion of essential terms and phrases, which brought clarity and consistency to the coding procedure.

Figure 3. 1. Step model for deductive category application, adapted from Mayring (2000)



3.3.1. Coding scheme for research question 1

The data for this study came from the listening components (i.e., listening activities and listening comprehension check questions) included in the listening activities found in the Turkish Ministry of National Education's 8th grade English coursebook, *Mastermind*. For the first research question, all the listening activities were extracted from the coursebook and analyzed according to the coding scheme designed for this study by the researcher.

To begin with, the related literature was reviewed in detail to understand how listening skills were approached by experts in the field of education. There are different perspectives regarding listening. For example, the position of listening was an important factor to be discussed in this study, whether listening was in the primary or secondary position. In some of the activities, listening was apparent and in the primary position, which made it easier to identify their characteristics inclusively. Whereas in some other cases, listening was not in the secondary position, which meant that it was integrated with other skills (i.e., reading, speaking, and writing). Determining the position of listening was necessary for this research to understand the role of listening in the coursebook.

Regarding the processing of listening, two main models have been introduced: bottom-up and top-down (Marlina, 2017; Nation & Newton, 2000; Richards & Renandya, 2002; Rost, 2015). Bottom-up processing is the method of speech comprehension that analyzes individual sounds and sensory details to construct a comprehensive understanding of the message. In top-down processing, however, background knowledge, context, and linguistic knowledge are utilized to comprehend spoken language. On the other hand, some experts agree that there is a dynamic interplay between bottom-up and top-down processing in effective listening (Flowerdew & Miller, 2005; Hinkel, 2018; Nunan, 2002). It is believed that the successful integration of both processes enables observers to comprehend spoken language accurately and efficiently. Therefore, the interactive model, which was first introduced by Rumelhart (1975), needed to be included in the coding scheme for this research.

Another section to be included in the coding scheme for the first question was the role of the listener. When the listener is required to participate in the interaction, this is known as reciprocal listening, whereas non-reciprocal listening occurs when the listener

does not have the option of responding, clarifying, comprehending, or verifying (Richards & Renandya, 2002).

Moreover, the type of listening activities needed to be included in the coding scheme in order to understand the nature of the activities more clearly. There are many different categorizations in related literature regarding the types of listening activities (Adelmann, 2012; Coburn & Edge, 2007; Wolvin & Coakley, 1996). This study identifies five primary types of listening in ELT: discriminative, comprehensive, critical, evaluative, and appreciative. These five types of listening skills are interdependent and develop over time through exposure to authentic spoken language and practice.

Another important aspect in terms of listening activities was determining the task type. In the related literature, there are various types of listening tasks, including gap filling, multiple choice, true/false, information gap, etc. All the listening tasks were analyzed and classified according to their types, and thereby the most commonly used ones were specified (see Table 3. 1.).

Finally, the purpose of listening was included in the coding scheme for the first research question. This part of the coding scheme was based on Wilson's (2008) categorization, in which four main purposes were mentioned: listening for the gist, listening for specific information, listening in detail, and inferential listening. However, by taking the listening activities in this particular coursebook into consideration, some changes were made by the researcher. Some of the activities included questions that needed literal understanding while listening in detail. On the other hand, there were some questions that required inferential understanding while still belonging to the listening in detail section. Therefore, it was noted that both literal and inferential listening sub-sections belonged to the listening in detail section (see Table 3. 1.).

Table 3. 1. Coding scheme for research question 1

Position of Listening	• primary • secondary
Processing Model	• top-down • bottom-up • interactive
Role of Listener	• reciprocal • non-reciprocal
Type of Listening	• discriminative • comprehensive • critical • evaluative • appreciative
Task Type	• brainstorming • chart filling • dialogue • editing • gap filling • info gap • multiple choice • opinion gap • role play • sequencing • true-false
Purpose of Listening	• listening for gist • listening for specific information • listening in detail (literal vs. inferential)

3.3.2. Coding scheme for research question 2

For the second research question, the researcher focused on the language used in the questions in order to identify the level of cognitive complexity and depth of knowledge required to answer the questions successfully and to fulfill the learning objectives for teaching listening. With this purpose in mind, all of the listening activities were extracted from the coursebook and prepared for the data analysis process.

The Hess' Cognitive Rigor Matrix (HCRM) was integrated into the questions appearing in the listening tasks in *Mastermind* via a deductive category application. Deductive category application refers to the practice of analyzing text using pre-existing

categories while adhering to a coding protocol (Marying, 2000). HCRM, which classifies thinking, served as the pre-existing category for this research. Figure 3.2. illustrates the deductive category application step model, which was modified from Mayring (2000).

This study was best suited for Hess' Cognitive Rigor Matrix since the framework is beneficial for classifying the forms of higher-order thinking based on content-specific characteristics in the questions presented in the coursebook. The language contained in each category of the matrix corresponds with language referring to various forms of thinking found in the extended literature review. The combination of Bloom's taxonomy and Webb's depth of knowledge enables educators and test developers to examine tasks in detail and determine the level of difficulty associated with each task. The matrix allows each question or task to be assessed by kind and by the amount of cognitive effort required of students, allowing each question to be examined from various angles (Olivero, 2020). All the listening tasks in the 8th grade ELT coursebook *Mastermind* were categorized using this matrix.

Table 3 visualizes a sample coding template to be used while representing the data collected from the coursebook, Mastermind, with related categories for each question according to Hess' Cognitive Rigor Matrix. On the top of the Cognitive Rigor Matrix, the letters (A, B, C, and D) represent Webb's DOK levels (i.e., recall and reproduction as DOK level 1, skills and concepts as DOK level 2, strategic thinking and reasoning as DOK level 3, and extended thinking as DOK level 4). Under each DOK level, the numbers stand for the cognitive levels in Bloom's Revised Taxonomy (i.e., remember, understand, apply, analyze, evaluate, and create). By completing the table, the researcher aims to codify the questions in the listening tasks of the 8th grade ELT book "Mastermind" by type and by the level of cognition students are expected to use.

Figure 3. 2. HCRM for Reading-Listening

HESS COGNITIVE RIGOR MATRIX / READING-LISTENING CRM				
Revised Bloom's Taxonomy	**DOK Level 1 (A,_) Recall and Reproduction**	**DOK Level 2 (B,_) Skills and Concepts**	**DOK Level 3 (C,_) Strategic Thinking or Reasoning**	**DOK Level 4 (D,_) Extended Thinking**
Remember (_,1) Retrieve knowledge from long term memory, recognize, recall, locate, identify	**Remember, Recall (A,1)**	Use these Hess CRM curricular examples with most close reading or listening assignments or assessments in any content area.		
Understand (_,2) Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion, predict, compare–contrast, match like ideas, explain, construct models	**Understand, Recall (A,2)**	**Understand, Skills and Concepts (B,2)**	**Understand, Strategic Thinking or Reasoning (C,2)**	**Understand, Extended Thinking (D,2)**
Apply (_,3) Carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task	**Apply, Recall (A,3)**	**Apply, Skills and Concepts (B,3)**	**Apply, Strategic Thinking or Reasoning (C,3)**	**Apply, Extended Thinking (D,3)**
Analyze (_,4) Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view)	**Analyze, Recall (A,4)**	**Analyze, Skills and Concepts (B,4)**	**Analyze, Strategic Thinking or Reasoning (C,4)**	**Analyze, Extended Thinking (D,4)**
Evaluate (_,5) Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique	"UG"—unsubstantiated generalizations = stating an opinion without providing any support for it!		**Evaluate, Strategic Thinking or Reasoning (C,5)**	**Evaluate, Extended Thinking (D,5)**
Create (_,6) Reorganize elements into new patterns or structures, generate, hypothesize, design, plan, produce	**Create, Recall (A,6)**	**Create, Skills and Concepts (B,6)**	**Create, Strategic Thinking or Reasoning (C,6)**	**Create, Extended Thinking (D,6)**

Figure 3. 3. Sample coding template

		A DOK Level 1 Recall and Reproduction					**B** DOK Level 2 Skills and Concepts					**C** DOK Level 3 Strategic Thinking and Reasoning					**D** DOK Level 4 Extended Thinking				
Units	**Question**	**Remember**	**Understand**	**Apply**	**Analyze**	**Create**	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Create**	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Create**	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Create**
Unit 1																					

In total, this study contained 53 listening activities to be analyzed separately by two coders (the researcher and the consultant coder) according to the Hess' Cognitive Rigor Matrix. During the initial coding session, which included coder calibration, any question placed in categories 3 and 4 of Webb's levels would be classified as higher level because the types of activities and questions raised to students in these categories are more cognitively demanding. These higher-order thinking categories were coded as (C,2), (C,3), (C,4), (C,5), (C,6), (D,2), (D,3), (D,4), (D,5), and (D,6). In parallel, any questions placed in categories 1 and 2 of Webb's levels would be considered lower level due to the simplicity of the questions presented, according to Hess' CRM. These lower-order thinking categories were coded as (A,1), (A,2), (A,3), (A,4), (A,6), (B,2), (B,3), (B,4), and (B,6). The detailed explanation of the coding is represented in Figure 3.3. above.

The developed coding scheme included the following categories and explanations (adapted from Hess, 2009):

- **(A,1):** ***Webb's Level 1, Bloom's Level 1*****:** Recall, identify, or locate facts, terminology, details, or ideas stated explicitly in texts. Retrieve information from long-term memory, recall, recognize, find, and identify.

- **(A,2):** ***Webb's Level 1, Bloom's Level 2*****:** Describe or identify literary components (characters, setting, dialogue, problem, etc.). Choose appropriate words when the intended meaning or definition is clear. Specify who, what, where, when, and/or how. Define/describe facts, details, concepts, principles. Write basic sentences. Construct meaning, clarify, paraphrase, represent, translate, demonstrate, give instances, classify, categorize, summarize, generalize, draw a logical conclusion, predict, compare/contrast, match similar concepts, explain, and build models.

- **(A,3):** ***Webb's Level 1, Bloom's Level 3*****:** Determine the meaning of words using language structure and word relationships. Edit spelling, grammar, word usage, punctuation, and conventions using applicable rules and resources. Document your sources using standard formats. Perform or use a process in a specific context; perform (apply to a familiar task) or use (apply to an unfamiliar task).

- **(A,4):** ***Webb's Level 1, Bloom's Level 4*****:** Identify specific information included within graphical or textual elements. Determine the proper text type and text structure for the intended audience and purpose. Determine relevant key terms for

Internet use. Break into constituent parts, determine how parts link, discern relevant from irrelevant, discriminate, focus, select, arrange, outline, find coherence, and deconstruct.

- **(A,6): *Webb's Level 1, Bloom's Level 6*:** Regarding a topic, principle, or notion, brainstorm ideas, concepts, difficulties, and points of view. Restructure elements into novel patterns/structures, develop, hypothesis, design, and produce.

- **(B, 2): *Webb's Level 2, Bloom's Level 2*:** Specify/explain relationships; provide justification. Give non-examples/examples. Summarize outcomes, concepts, ideas, and process phases. Make simple deductions or logical predictions based on data or text. Determine the text's key concepts or accurate generalizations. Find evidence to support explicit-implicit core notions. Construct meaning, clarify, paraphrase, represent, translate, demonstrate, give instances, classify, categorize, summarize, generalize, draw a logical conclusion, predict, compare/contrast, match similar concepts, explain, and build models.

- **(B, 3): *Webb's Level 2, Bloom's Level 3*:** Determine the meaning of words/phrases by using context. Obtain, interpret, and explain information by utilizing text features. Create a text that can fit within a single paragraph. Utilize basic organizational structures when writing. Perform or use a process in a specific context; perform (apply to a familiar task) or use (apply to an unfamiliar task).

- **(B, 4): *Webb's Level 2, Bloom's Level 4*:** Compare literary components, terminology, facts/details, occurrences. Identify literary devices used. Examine the text's format, arrangement, and internal structure. Differentiate relevant from irrelevant information; facts from opinions. Identify textual characteristics; differentiate between texts and genres. Break into constituent parts, determine how parts link, discern relevant from irrelevant, discriminate, focus, select, arrange, outline, find coherence, and deconstruct.

- **(B, 6): *Webb's Level 2, Bloom's Level 6*:** Generate hypotheses, claims, or credible reasons for opinion-argumentation based on observations, prior knowledge, and experience. Restructure elements into new patterns/structures; develop, speculate, design, and produce.

- **(C, 2): *Webb's Level 3, Bloom's Level 2*:** Explain or generalize the meaning or theme of a work using evidence as support Describe how the reader's understanding of a text may be affected by word choice, point of view, or potential prejudice. Write a multi-paragraph essay with a specific aim, focus, voice, tone, and audience in mind. Construct meaning, clarify, paraphrase, represent, translate, demonstrate, give instances, classify, categorize, summarize, generalize, draw a logical conclusion, predict, compare/contrast, match similar concepts, explain, and build models.

- **(C, 3): *Webb's Level 3, Bloom's Level 3*:** Apply a concept in a different setting. Revise final draft for meaning, coherence, and concept growth. Compose a whole piece using text organization and structure that is internally consistent. Utilize word choice, point of view, and style to influence the interpretation of a work by readers/viewers. Execute or employ a process in a certain circumstance; execute (apply to a familiar task) or employ (apply to an unfamiliar task).

- **(C, 4): *Webb's Level 3, Bloom's Level 4*:** Analyze information included in data sets within a given text. Analyze interrelationships among concepts, issues, and difficulties in a text, website, etc. Analyze or analyze the author's craft to compose or critique a text. Employ logic, preparation, and evidence to bolster inferences. Break into constituent parts, determine how parts link, discern between significant and irrelevant, discriminate, concentrate, select, organize, outline, find coherence, and deconstruct.

- **(C, 5): *Webb's Level 3, Bloom's Level 5*:** Cite evidence and construct a logical case for hypotheses. Describe and compare solution methods. Justify/critique author logic, results, or conclusions. Judge based on criteria, examine, identify errors or fallacies, evaluate, and criticize.

- **(C, 6): *Webb's Level 3, Bloom's Level 6*:** Synthesize information contained in a single text or source. Create a comprehensive model for a specific situation. Create a replacement solution. Restructure elements into novel patterns/structures, develop, hypothesis, design, and produce.

- **(D, 2): *Webb's Level 4, Bloom's Level 2*:** Explain the unique relationship between concepts or ideas and different subject domains, concepts, or texts using evidence

from multiple sources. Apply generalizations of the obtained results or employed tactics to new problem-based scenarios. Construct meaning, clarify, paraphrase, represent, translate, demonstrate, give instances, classify, categorize, summarize, generalize, draw a logical conclusion, predict, compare/contrast, match similar concepts, explain, and build models.

- **(D, 3): *Webb's Level 4, Bloom's Level 3*:** Using evidence from numerous sources, demonstrate the interrelationships between multiple themes throughout texts. To investigate a novel problem, choose or create a strategy from a variety of options. Execute or employ a process in a certain circumstance; execute (apply to a familiar task) or employ (apply to an unfamiliar task).

- **(D, 4): *Webb's Level 4, Bloom's Level 4*:** Analyze multiple evidence sources, multiple works by the same author, genres, historical periods, and themes. Examine divergent ideas, opinions, and policies. Gather, evaluate, and arrange different sources of information. Analyze the discourse styles of many texts. Break into constituent parts, determine how components link, discern relevant from irrelevant, discriminate, focus, select, arrange, outline, find coherence, and deconstruct.

- **(D, 5): *Webb's Level 4, Bloom's Level 5*:** Evaluate the applicability, accuracy, and completeness of information from multiple sources. Apply knowledge in an original manner, then argue or justify the application. Make judgements based on criteria, check, find errors or fallacies, judge, and critique.

- **(D, 6): *Webb's Level 4, Bloom's Level 6*:** Integrate knowledge from several sources or writings. Develop an alternative theme, a new voice, new information, or a sophisticated viewpoint. Reorganize elements into new structures/patterns, develop, hypothesis, design, and produce.

3.4. Validity and Reliability

The data taken from the coursebook was analyzed by the researcher, and then another coder was consulted in order to increase the reliability of the study. The researcher, in collaboration with the consultant coder, utilized methodical and replicable approaches to reduce confirmation bias during the coding process. By analyzing the each listening

activity and comparing it to the framework of the HCRM, the researcher aimed to achieve convergence and coordination through the utilization of various data sources and methods (Bowen, 2009). Therefore, the researcher attempted to establish credibility-enhancing convergent evidence through the process of data triangulation (Eisner, 1991).

As described in A Local Assessment Toolkit to Promote Deeper Learning: Transforming Research into Practice (Hess, 2018), the researcher and the consultant coder were appropriately trained to utilize the HCRM application. To increase validity and reliability throughout the data analysis procedure, coders justified their placement decisions throughout the HCRM by inputting the associated explanations from the selected cell for each listening activity.

The double-rater read-behind consensus model is recognized as an efficient technique for boosting inter-rater reliability (Miles et al., 2014; Sato et al., 2011). With the use of this model, the researcher and the consultant coder were able to debate and provide justification for the assignment of each listening action to a particular HCRM category as well as the coding scheme created for the initial research question. Thus, the researcher and a consultant coder reviewed the results while analyzing the data using the double-rater read-behind consensus model to ensure the reliability of the coding. This technique increased the two coders' reliability.

CHAPTER IV
FINDINGS AND DISCUSSION

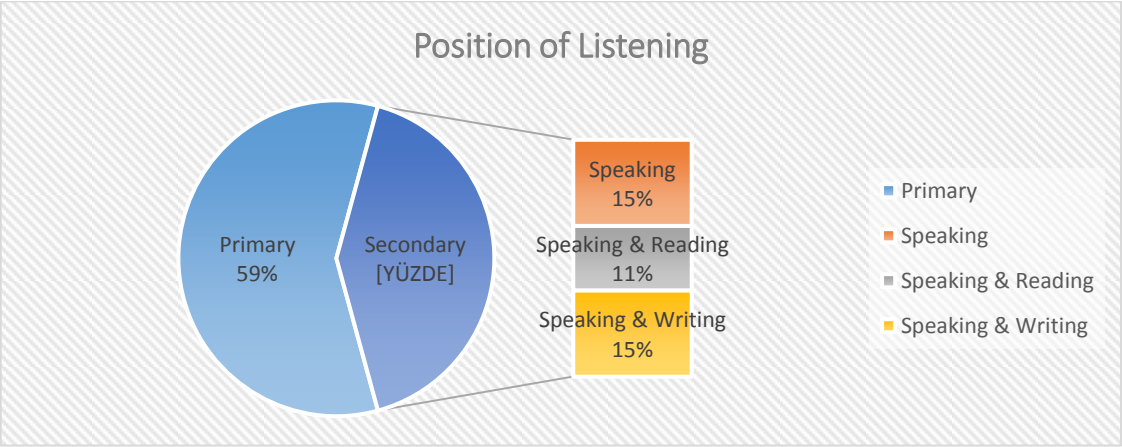
In this part of the thesis, the findings of the study and the results obtained from the coursebook *Mastermind* are presented. In this chapter, the qualitative and quantitative findings are discussed with representative samples of listening activities from the coursebook, along with the knowledge and cognitive levels of the activities based on the revised Bloom's Taxonomy and Webb's Depth of Knowledge dimensions.

4.1. Findings for Research Question 1

Research question 1: *What are the types of listening activities included in the 8th grade MoNE coursebook Mastermind?*

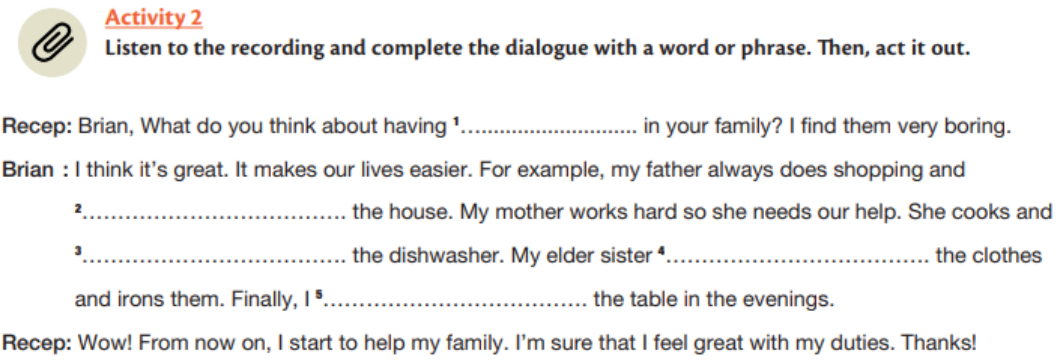
To answer this question, all the activities, which aim to develop listening skills in both primary and secondary positions, were extracted from the coursebook to be analyzed according to the coding schemes explained in the methodology section of this study. The initial analysis revealed that there were 53 listening activities in the coursebook in total: 31 of them were in the primary position (while-listening activities had actual listening tracks), whereas in 22 of the activities, listening was in the secondary position (8 of them were integrated with speaking, 6 of them were integrated with speaking and reading, and 8 of them were integrated with speaking and writing) (see Figure 4.1.).

Figure 4. 1. Position of listening in "*Mastermind*"



The results strongly imply that all of the listening activities that are in the primary position show reciprocal listening features, whereas the activities that are integrated with other skills (i.e., listening in the secondary position) are non-reciprocal. In other words, 31 out of 53 listening activities were identified as non-reciprocal, whereas 22 of them were reciprocal (see Table 4. 1.). This finding was not unexpected due to the fact that listeners, in this case, students, are more likely to get into interaction, especially when the activity requires them to speak. Figure 4.2. displays a listening activity in which listening is in the primary position and listeners are not supposed to interact with each other (i.e., non-reciprocal listening). Additionally, Figure 4.3. represents an activity in which listening is integrated with speaking and therefore is in the secondary position.

Figure 4. 2. Sample non-reciprocal listening activity in "*Mastermind*"



Activity 2

Listen to the recording and complete the dialogue with a word or phrase. Then, act it out.

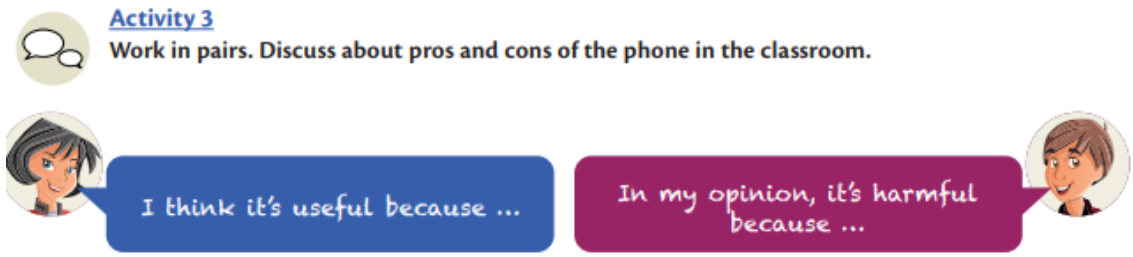
Recep: Brian, What do you think about having [1]..... in your family? I find them very boring.

Brian : I think it's great. It makes our lives easier. For example, my father always does shopping and [2]..... the house. My mother works hard so she needs our help. She cooks and [3]..... the dishwasher. My elder sister [4]..... the clothes and irons them. Finally, I [5]..... the table in the evenings.

Recep: Wow! From now on, I start to help my family. I'm sure that I feel great with my duties. Thanks!

Note. In this non-reciprocal listening activity, students are supposed to listen to the recording and fill in the gaps while listening. Listening is in the primary position in this activity.

Figure 4. 3. Sample reciprocal listening activity in "*Mastermind*"



Note. In this reciprocal listening activity, students are supposed to talk to each other about positive and negative aspects of using phones in the classroom. Listening is in the secondary position integrated with speaking.

Table 4. 1. Role of listener in "*Mastermind*"

Role of Listener	Number	Percentage
Reciprocal	22	42 %
Non-reciprocal	31	58 %

There are three primary approaches through which listening processing models can be conceptualized: interactive processing, top-down processing, and bottom-up processing. These approaches provide assistance in clarifying the manner in which individuals interpret auditory information while listening. The listening processing models were identified as bottom-up, top-down, and interactive models. The findings indicate that out of 53 activities, there were 18 bottom-up, 4 top-down, and 31 interactive models detected. The percentages of the listening processing models are displayed in Figure 4.3. Furthermore, samples from each processing model were represented further (see Figures 4.4. , 4.5. , and 4.6.).

Figure 4. 4. Listening processing models in "*Mastermind*"

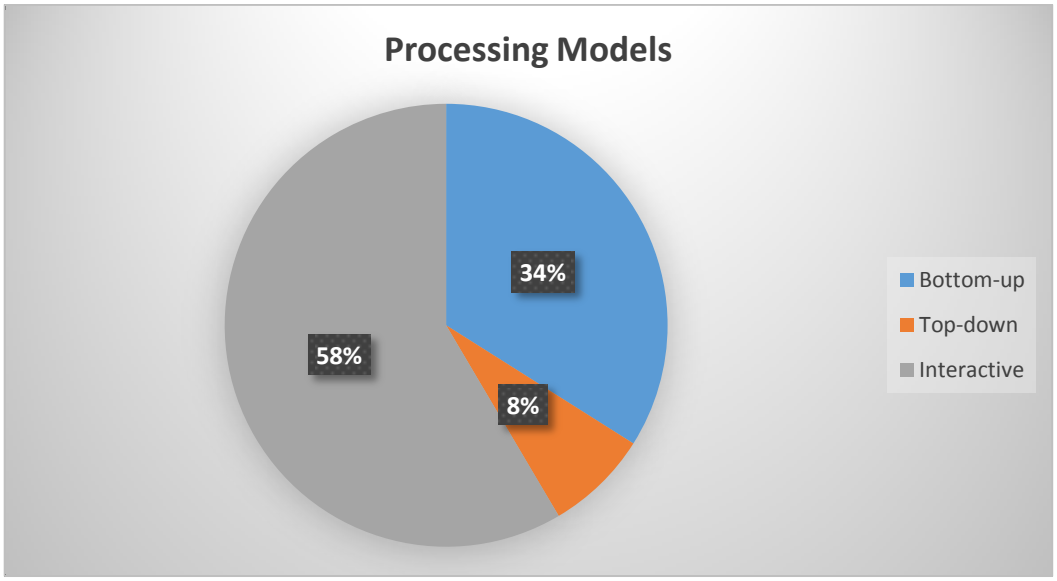


Figure 4. 5. Sample listening task requiring bottom-up processing in "*Mastermind*"

Activity 2

Listen to the recording. Fill in the blanks with the words/ phrases in the box.

cooking	do grocery shopping	dust the shelves	ironing
mopping	taking out the garbage	vacuuming	washing the dishes

Charles : What do you like doing as a chore, William?

William : Hmmm, I like doing laundry and [1] ..... . However, I dislike [2] ..... and we don't have any dishwasher. So, would you like to be responsible for?

Charles : Yes, it is OK for me. Everyone must tidy up his own room. I like [3] ..... and setting the table, but I hate [4] ..... . What about doing this?

William : Yeap! I do it in the evenings. Do you like [5] ..... the floor?

Charles : Yes, I do.

William : How about [6] ..... the floor?

Charles : Oh, no, I hate it. Can you do it, please? I'll make a cake every weekend instead of it.

William : That's all right. It is worth eating a piece of cake. We have furniture so we have to [7] ..... . I think we can do it in turn. Moreover, I prepare shopping list and [8] ..... .

Charles : That's great. Paying the bills falls to me. So, we have shared all the chores. I hope we'll keep our promises. So, we can live in a clean and peaceful flat.

William : I hope so.

Figure 4. 6. Sample listening task requiring top-down processing in "*Mastermind*"

Activity 1

Work in pairs. Brainstorm about camping. Fill in the mind map with your ideas.

Note. In this activity, listening is in the secondary position integrated with speaking and writing skills. Students are supposed to brainstorm ideas about camping, listen to each other's ideas and then write down their notes.

Figure 4. 7. Sample listening task requiring interactive processing in "*Mastermind*"

Note. In this interactive model listening activity, students are supposed to listen to the recording in detail, decide if the sentences are correct, and if not, write the correct word or phrase, in which they can both utilize bottom-up and top-down processing.

One of the most important aims of this particular research was to identify the types of listening activities in the coursebook. In accordance with the coding scheme in which listening types were determined (i.e., discriminative, comprehensive, critical, evaluative, and appreciative) for this particular study, the results showed that the most common type of listening was discriminative, which was followed by comprehensive, critical, and evaluative (see Table 4. 2.).

The findings clearly show that an appreciative type of listening activity was not detected in the coursebook. Another important issue regarding the types of listening is that all the discriminative type of listening activities were non-reciprocal and in primary position (see Figure 4.7.), whereas all the critical type of listening activities were reciprocal and in secondary position (see Figure 4.8.).

Figure 4. 8. Sample discriminative listening activity in "*Mastermind*"

Note. In this discriminative listening activity, students are supposed to listen and circle the correct word or phrase. It is a non-reciprocal listening activity with listening in the primary position.

Figure 4. 9. Sample critical listening activity in "*Mastermind*"

Note. In this critical listening activity, students are supposed to brainstorm ideas about responsibilities at school and write down their ideas in the mind map. This is a reciprocal listening activity with listening in secondary position integrated with speaking and writing skills.

Table 4. 2. Types of listening activities in "*Mastermind*"

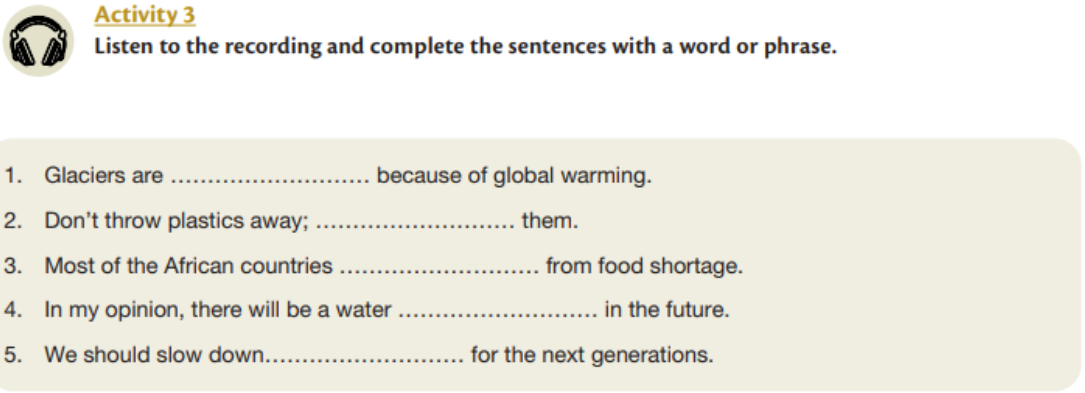
Type of Listening	Number	Percentage
Discriminative	21	40 %
Comprehensive	17	32 %
Critical	14	26 %
Evaluative	1	2 %
Appreciative	0	0 %

The listening components in the coursebook were also analyzed to reveal the specific listening task types and their quantities (see Table 4. 3.). As can be seen in the table, the most common task type was gap filling, followed by chart filling. Other than these, dialogues, multiple-choice questions, information gap, and opinion gap activities were placed in the coursebook. The least favorable type of task was sequencing, followed by editing and true-false questions. It was notable that all gap-filling types of questions in the coursebook belonged to discriminative listening at the same time, which requires lower-order thinking skills.

Table 4. 3. Listening task types in "*Mastermind*"

Listening Task Types	Number	Percentage
Gap filling	15	28 %
Chart filling	7	13 %
Role playing	5	9 %
Dialogue	5	9 %
Multiple choice	4	8 %
Information gap	4	8 %
Opinion gap	4	8 %
Brainstorming	4	8 %
True-False	2	4 %
Editing	2	4 %
Sequencing	1	1 %

Figure 4. 10. Sample gap filling activity in "*Mastermind*"



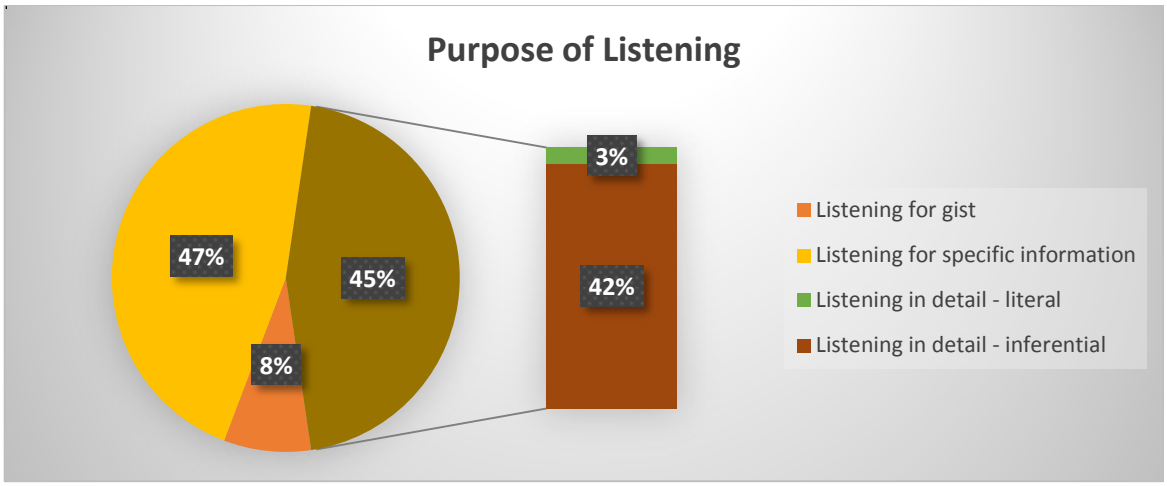
Activity 3

Listen to the recording and complete the sentences with a word or phrase.

1. Glaciers are ..... because of global warming.
2. Don't throw plastics away; ..... them.
3. Most of the African countries ..... from food shortage.
4. In my opinion, there will be a water ..... in the future.
5. We should slow down..... for the next generations.

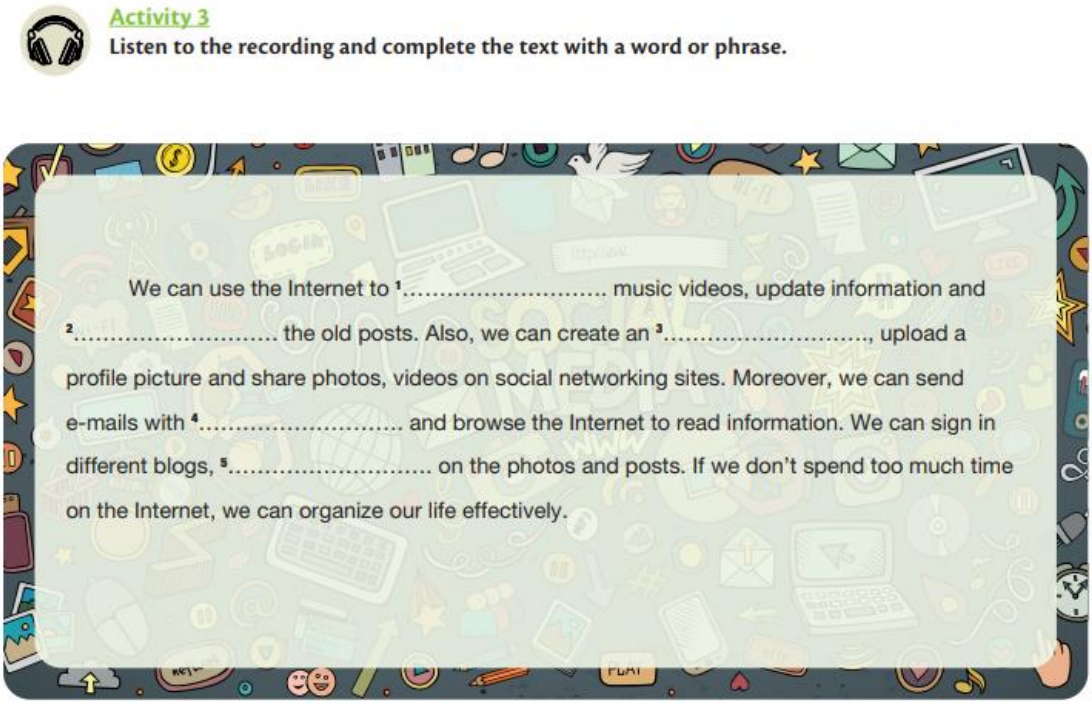
The same activities were also analyzed and investigated according to their purpose of listening (i.e., listening for gist, listening for specific information, and listening in detail). The sub-category "listening in detail" was divided into two: literal and inferential listening.

Figure 4. 11. Purpose of listening in "*Mastermind*"



It is quite a significant finding that the most commonly used purpose of listening was listening for specific information, with 23 out of 53 listening activities in the coursebook. An example of listening for specific information is shown below (Figure 4.12.).

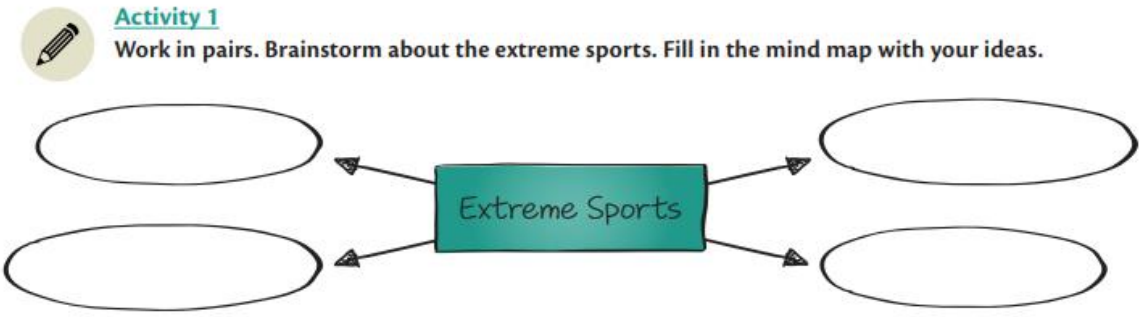
Figure 4. 12. Sample "listening for specific information" activity in "*Mastermind*"



Note. This is a non-reciprocal, discriminative type of listening activity in which the purpose is listening for specific information. Students are supposed to listen to the recording, pay attention to the specific parts and fill in the blanks with the correct answers.

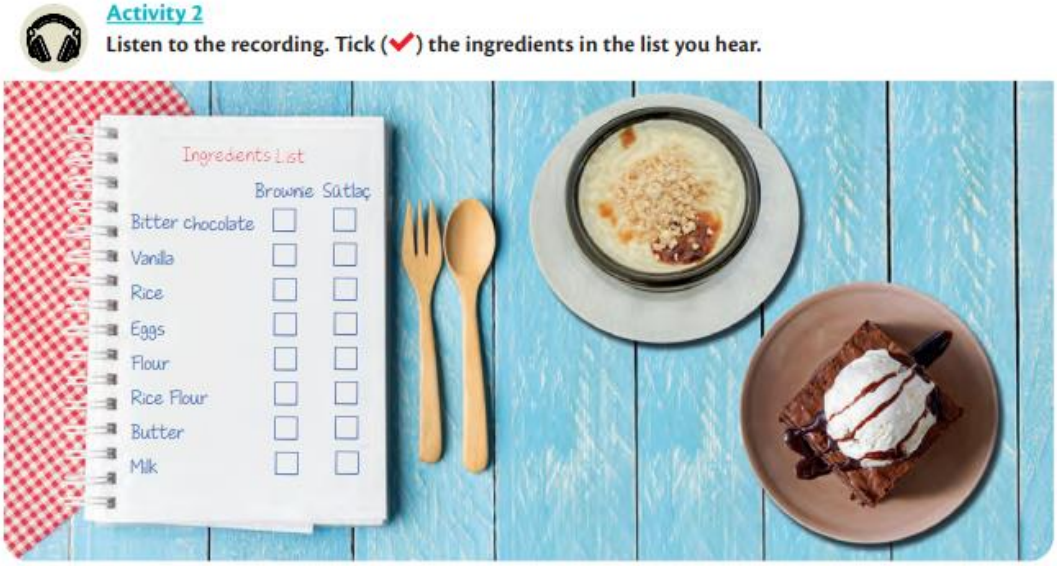
4 out of 53 listening activities were listening for the gist, or 8 percent. One significant finding highlights that, when the purpose of listening was listening for gist, all the questions in the coursebook were reciprocal, critical, and following a top-down processing model. Moreover, the task was written in a brainstorming style, and listening was in a secondary position integrated with speaking and writing skills (see Figure 4.13.). This is due to the fact that learners get involved in two-way interaction when the purpose of their listening is usually to get the main idea. In Figure 4.13., for instance, students are supposed to brainstorm ideas with their peers and fill in the mind map about extreme sports. In this case, students listen to their peers for the gist and then extract some keywords about the topic.

Figure 4. 13. Sample “listening for gist” activity in “Mastermind”



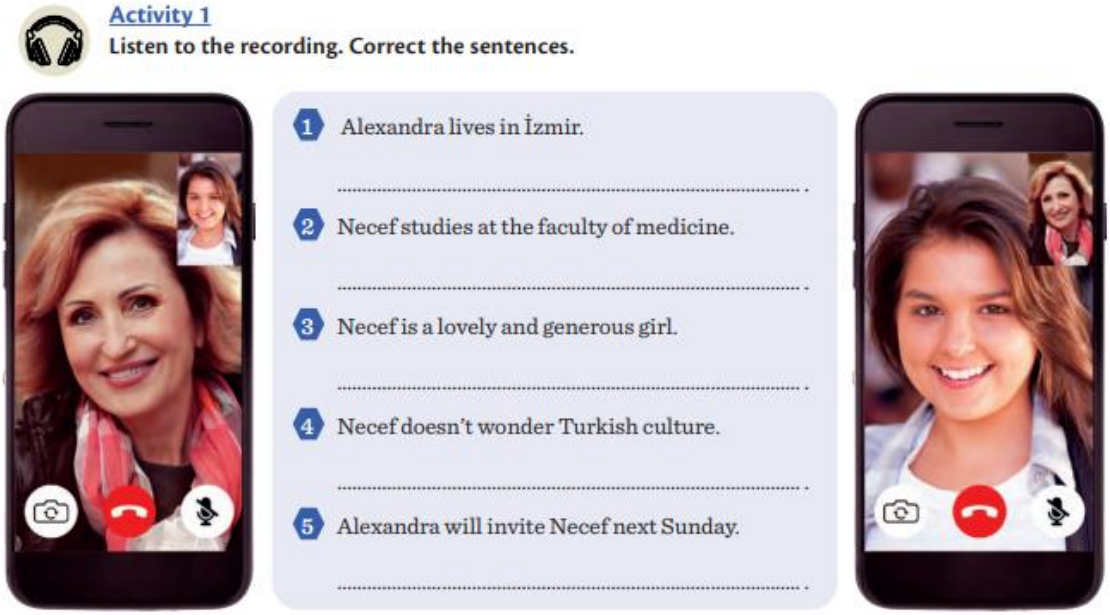
When it comes to listening in detail, the majority belonged to inferential listening, with 21 activities. Moreover, there were five listening-in-detail activities requiring literal meaning. For example, in Figure 4.14., students are supposed to listen to the recipes of two different desserts and then tick the ingredients they hear in an unspecified order. Since the ingredients are not shown in sequence, the purpose of this listening activity is to listen in detail by showing literal understanding (see Figure 4.14.).

Figure 4. 14. Sample “listening in detail – literal activity” in “*Mastermind*”



Another illustration of a listening in detail activity that was found in the textbook is shown down below. However, this time it calls for an inferential form of comprehension (see Figure 4.15.). In this exercise, students are instructed to give the tape a careful listen and then look for errors in the transcript that are not immediately obvious from the reading. Instead, people have to deduce what the meaning is.

Figure 4. 15. Sample “listening in detail – inferential” activity in “*Mastermind*”



4.2. Discussion on Findings for Research Question 1

The significance of listening, as defined by the CEFR is extensive and transcends multiple facets of communication and language proficiency. The CEFR emphasizes the interconnection of language skills (listening, speaking, reading, and writing) and recommends listening as a basic skill for other language skills. Effective listening comprehension prepares you to talk, read, and write in the target language (CoE, 2001). Effective communication requires proficient listening skills, which enable accurate comprehension of spoken language, understanding of different accents and varieties, and interpretation of implicit messages and non-verbal cues. Moreover, active listening is crucial for meaningful interactions, demonstrating respect, attentiveness, and comprehension of others' perspectives, enabling individuals to engage in conversations and dialogues. Therefore, it is anticipated that activities in *Mastermind* involving listening will support the purposes and objectives of the CEFR so that meaningful learning can take place.

The analyses of listening activities and listening comprehension check questions in the EFL coursebook "*Mastermind*" revealed that listening was in the primary position for every question using the bottom-up model; this indicates that listening is the activity's primary emphasis. On the other hand, in all the questions that follow top-down processing,

listening was in a secondary position integrated with speaking and writing skills. The phrase "bottom-up" describes a method of teaching that concentrates on particular target language elements rather than the more general top-down problems related to our background knowledge in culture, genre, topic, and context (Bailey, 2020).

Comprehension occurs when linguistic input is decoded, recognized, and comprehended according to the bottom-up approach (Marlina, 2017). This method focuses primarily on enhancing students' knowledge of sounds, words, sentences, and clauses. However, a coursebook that is planned to be used throughout a whole academic year needs to include both bottom-up and top-down processing because they are both perceived as equally important (Nunan, 2002). Using both types of listening processing, students might prepare background knowledge and ideas, consider crucial vocabulary and grammar, structure speech, or plan their conversational exchanges (Hinkel, 2018). In reality, top-down and bottom-up processes operate in tandem very infrequently (Goh & Vandergrift, 2012). For instance, according to Nix's (2016) research, bottom-up listening strategies do not directly affect learners' listening comprehension and must be mediated by top-down listening strategies. Similarly, Yeldham and Gruba (2014) suggested that bottom-up listening skills should be taught alongside knowledge-based listening strategies in order to develop learners' interactive listening abilities and that learners should "develop an interaction between bottom-up and top-down processes" in order to improve their listening abilities. All in all, the findings of this research reveal that the bottom-up, top-down, and interactive models were all referred to in a balanced way in this coursebook. This pattern of results is also consistent with the national curriculum, which suggests including both bottom-up and top-down listening techniques while preparing the tests (TTKB, 2018).

According to another perspective (Brown & Yule, 1983), there is a distinction between transactional and interactional listening in terms of the role of the listener. For a listening activity to be interactional, there needs to be two-way communication, and the students need to take part in the interaction, as in reciprocal listening (Richards & Renandya, 2002). In their study, Richards and Burns (2012) employ the terms reciprocal talk and non-reciprocal talk to describe different patterns of conversation. Reciprocal talk refers to the practice of taking turns as both a speaker and a listener, whereas non-reciprocal talk refers to situations where one participant alone assumes the role of a listener (Richards & Murns, 2012). Having analyzed all the questions in listening activities, most

of these questions display transactional purposes and are non-reciprocal because there is a one-way flow of communication and the students have no option of answering back. Additionally, there is an important detail about this finding, which is the fact that all the listening tasks in the primary position are non-reciprocal. Therefore, in situations where listening appears in a secondary position, the task is reciprocal. This result is anticipated due to the nature of the listening tasks in Mastermind, which only facilitate student interaction when they are combined with other skills, such as speaking (see Figure 4.10.).

The coding scheme organized for the analysis of the first research question also included a section that represents the different types of listening (i.e., discriminative, comprehensive, critical, evaluative, and appreciative). It is crucial to note that these are interdependent and develop over time through exposure to authentic spoken language and practice. ELT teachers utilize a variety of listening activities and materials to help students develop these skills. One of the key issues regarding the types of listening activities is that all discriminative listening activities were non-reciprocal and in the primary position, while all critical listening activities were reciprocal and in the secondary position. This could be important, yet not shocking, because discriminatory types of questions do not necessarily require interaction. Likewise, it could be deduced that reciprocal questions require students to interact with each other, which leads to reciprocal listening. This pattern of results is consistent with the previous literature in the sense that a specific combination of these listening types is likely to be most suitable in a given teaching context (Rost, 2015). It is well established that all of these kinds of listening practices are beneficial for language learning and acquisition. These results of the present study support Krashen's input hypothesis (1985; 2014), which puts out the fundamental idea that a person can only learn a second language by understanding messages or receiving information that is understandable to them. Given that language knowledge is cumulative in certain ways, this is not surprising. One requires a location to store new information and a foundation upon which to analyze—that is, comprehend—new information (Gass & Selinker, 2008).

When it comes to developing skills, listening may be considered the most complex and difficult one (Martinez, 2010). This is because listening involves not only understanding what speakers are trying to say but also responding to them at times simultaneously (during a natural interaction) and other times right away (during a classroom activity) (Şahin, 2015). Therefore, listeners develop strategies, and effective

strategies must be recognized, modeled, and implemented (Rost, 2006). Hinkel (2006) points out that learners can intentionally manage strategies, and listeners can be trained to make up for lost language or schematic data, misinterpreted cues, or insufficient understanding. It is important for teachers to choose activities that help students process the meaning of the text, rather than distracting them from the task. Tasks should be designed to guide students through the listening process and help them improve their understanding and use of listening skills and strategies (Richards, 2015). In this coursebook, *Mastermind*, various types of listening tasks were spotted, including gap filling, chart filling, dialogue, role playing, information gap, multiple choice, true-false, etc. (see Figure 4.5.). What is notable here is that all the gap-filling tasks were discriminative, non-reciprocal, and in primary position as a listening activity (see Figure 4. 13.).

As stated in the English Language Curriculum for Primary Education published by the MoNE—The Committee of Education and Instruction (2006), listening and speaking skills are the primary focus of the lesson for 8th grade, whereas the secondary focus is on reading and writing. Therefore, listening is supposed to be handled carefully in the coursebook *Mastermind*. The national curriculum explicitly states that different variations of testing techniques are suggested to be used in listening, such as matching, listening and performing, omitting irrelevant information, selective listening, understanding the overall meaning, recognizing specific information, etc. (TTKB, 2018). This idea is further supported by the finding that various kinds of listening activities are applied in the coursebook *Mastermind*.

Taken together, the findings for the first research question indicate that the analyzed coursebook approaches listening skills in various ways with a range of different activities. However, it must also be noted that most of these activities are at a basic level, in which students simply need to listen for specific information and use discriminative type of listening. It has been suggested that giving students exercises that emphasize formal feature recognition over general meaning comprehension is one approach to improving formal accuracy in the context of teaching foreign languages (Færch & Kasper, 1983).

4.3. Findings for Research Question 2

The second research question was: *What is the extent to which cognitive levels of Bloom's Revised Taxonomy and knowledge dimensions of Webb's Depth of Knowledge are represented in listening activities in Mastermind?*

To address the second research question, all the listening activities in the ELT MoNE coursebook Mastermind were examined to see the degree to which cognitive and knowledge levels they represent. To this extent, Hess' Cognitive Rigor Matrix was used to analyze both levels in a comprehensive way. In accordance with Bloom's Taxonomy's six levels, the task's difficulty can rise within these levels. Prior to delving further into the HCRM, it was necessary to consider Bloom's Taxonomy and Webb's Depth of Knowledge from different perspectives.

According to Bloom's Taxonomy (Revised), the lower three categories represent LOTS (i.e., remember, understand, apply). 7 out of 53 questions belonged to the remember category, 38 questions belonged to the understand category, and 2 questions belonged to the apply category.

The upper three categories of Bloom's Taxonomy represent HOTS (i.e., analyze, evaluate, and create). Students need to deconstruct (e.g., for bias or perspective), focus, select, organize, outline, discover coherence, and deconstruct (e.g., for coherence) in order to demonstrate the skill of "analyzing" while listening. This cell of the HCRM included only two of the listening activities from the coursebook Mastermind. Students are expected to judge based on criteria, examine, identify inconsistencies or fallacies, evaluate, and critique while listening in order to fulfill the "evaluating" skill requirement. None of the listening exercises in Mastermind belonged to this section of the HCRM. While listening, students are expected to rearrange components into novel patterns or structures, generate, hypothesize, design, and produce in order to demonstrate their "creating" skill. Only 4 out of 53 listening activities in Mastermind belonged to this section of the HCRM (see Table 4. 4.).

Table 4. 4. Frequency of each listening activity placed in Bloom's Taxonomy

Bloom's Taxonomy	Number	Percentage
Remember	7	13 %
Understand	38	72 %
Apply	2	4 %
Analyze	2	4 %
Evaluate	0	0 %
Create	4	7 %

Note. This table represents all the listening activities in "*Mastermind*" from the perspective of Bloom's Taxonomy. Hence, only the cognitive dimension is mentioned here.

When it comes to Webb's depth of knowledge, 29 out of 53 questions were in *Level 1* (recall and reproduction), whereas 9 questions were in *Level 2* (skills and concepts), and 15 questions were in *Level 3*. None of the questions appeared at *Level 4* (extended thinking), which represents the HOTS (see Table 4. 6.).

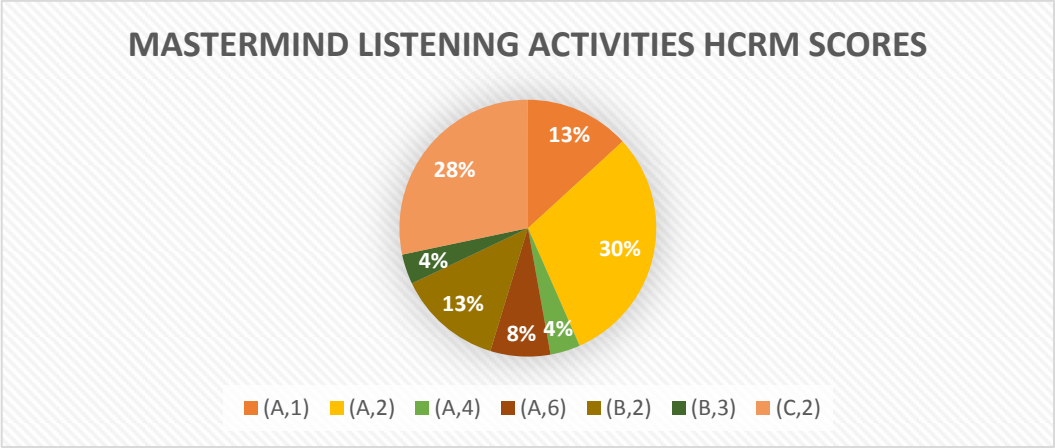
Table 4. 5. Frequency of each listening activity placed in Webb's Depth of Knowledge

Webb's Depth of Knowledge	Number	Percentage
Level 1 ***Recall and Reproduction***	29	53 %
Level 2 ***Skills and Concepts***	9	17 %
Level 3 ***Strategic Thinking or Reasoning***	15	28 %
Level 4 ***Extended Thinking***	0	0 %

Note. This table represents all the listening activities in "*Mastermind*" from the perspective of Webb's Depth of Knowledge. Hence, only the knowledge dimension is mentioned here.

The HCRM includes (A,1), (A,2), (A,3), (A,4), and (A,6), which represent the lowest level of cognitive complexity. The following codes represented Level 2 reasoning: (B,1), (B,2), (B,3), (B,4), (B,5), and (B,6). Level 3 identifies the following codes: (C,2), (C,3), (C,4), (C,5), and (C,6). These were the level 4 codes: (D,2), (D,3), (D,4), (D,5), and (D,6). According to the Webb Alignment Tool, questions at Levels 3 and 4 of Webb's Depth of Knowledge scale are categorized as higher-order thinking questions, according to both the researcher and the consultant coder. These levels, which reflect higher-level thought language, call for text analysis, the application of past information, and abstract or critical thinking (Webb et al., 2005). The overall percentages of each HCRM cell found in the ELT coursebook *Mastermind* are shown below (see Figure 4.16.).

Figure 4. 16. Percentages of listening activities for each HCRM cell in "*Mastermind*"



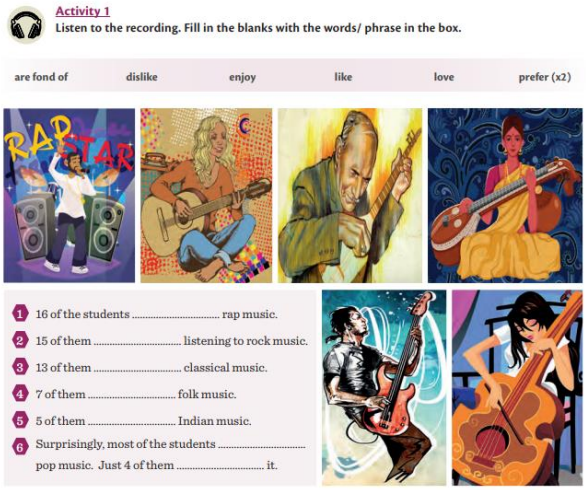
28% of all 53 questions examined for the second research question were arranged in cell (A,1) of the matrix, which contained 7 questions. At this level (Webb's DOK Level 1; Bloom's Taxonomy, Remember), students are expected to recall facts that are explicitly stated in the provided text or passage. An example of (A,1) type of activity found in the coursebook is presented in Figure 4.17.

Figure 4. 17. Sample (A,1) type of listening activity in "*Mastermind*"

Note. In this activity, listening is in primary position. It is a non-reciprocal, discriminative type of multiple choice listening activity in which the purpose is listening for specific information. Students are supposed to listen to the recording, and choose the correct option.

Likewise, 16 questions were placed in the (A, 2) cell of the matrix, which accounted for 30% of the questions examined. At this level (Webb's DOK Level 1; Bloom's Taxonomy, Understand), students may need to select appropriate words when the intended meaning or definition is clearly evident. Figure 4.18. represents a solid example of a listening activity that is placed in the (A,2) cell in HCRM.

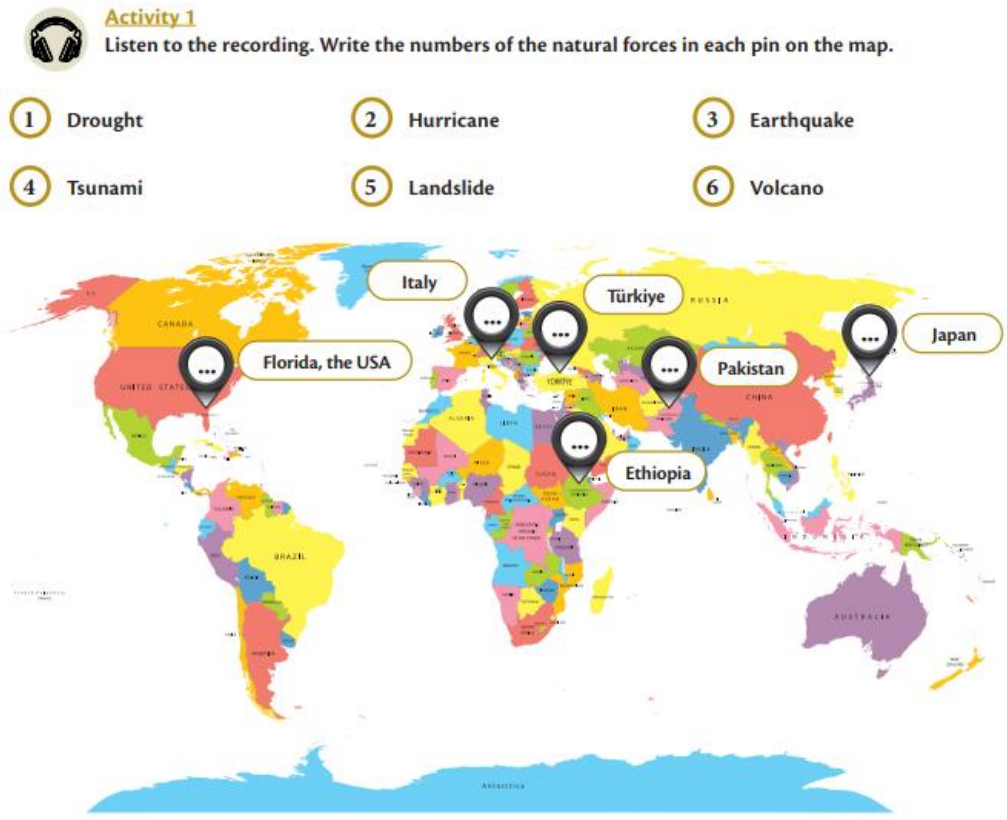
Figure 4. 18. Sample (A,2) type of listening activity in "*Mastermind*"



Note. In this activity, listening is in primary position. It is a non-reciprocal, discriminative type of listening activity in which the purpose is listening for specific information. Students are supposed to listen to the recording, pay attention to the specific parts and fill in the blanks with the correct answers.

In the (A,4) cell of the matrix, 2 questions were positioned, representing 4% of the questions examined. Students at this level (Webb's DOK Level 1; Bloom's Taxonomy, Analyze) may determine whether particular information is contained in graphic representations (e.g., map, chart, table, graph, T-chart, diagram) or text elements (e.g., headings, subheadings, captions) (Hess, 2009). Figure 4.19. displays a listening activity that was placed in the (A,4) cell of HCRM.

Figure 4. 19. Sample (A,4) type of listening activity in "*Mastermind*"



Note. In this activity, listening is in primary position. It is a non-reciprocal, comprehensive type of chart-filling activity in which the purpose is listening for literal meaning (listening in detail). Students are supposed to listen to the recording, pay attention to the order the natural forces and write the numbers on the map.

Additionally, 4 questions were positioned in the (A,6) cell of the matrix, which represents 8% of the questions. At this level (Webb's DOK Level 1; Bloom's Taxonomy, Create), students are required to brainstorm ideas, concepts, problems, or perspectives associated with a subject, principle, or concept (Hess, 2009). Figure 4.20. represents a listening activity that was placed in the (A,6) cell of HCRM.

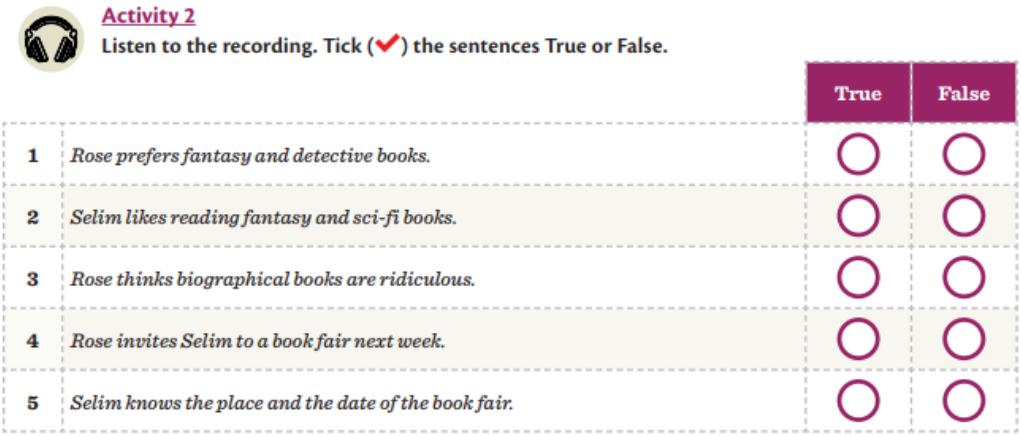
Figure 4. 20. Sample (A,6) type of listening activity in "*Mastermind*"

Note. In this activity, listening is in secondary position integrated with speaking and writing. It is a reciprocal, critical type of brainstorming activity in which the purpose is listening for gist. Students are supposed to work in pairs, listen to each other's ideas, and then write down their notes.

Notably, there was no single listening activity representing the (A,3) cell of the matrix (Webb's DOK Level 1; Bloom's Taxonomy, Apply). At this level, students may need to utilize principles or resources to correct orthography, grammar, punctuation, and word usage (Hess, 2009).

Regarding Webb's DOK Level 2, there were 7 questions representing the (B,2) cell of the matrix. 13% of the questions belong to this cell (Webb's DOK Level 2; Bloom's Taxonomy, Understand). Students at this level may be required to make basic inferences or logical predictions from data or texts.

Figure 4. 21. Sample (B,2) Type of Listening Activity in "Mastermind"



Activity 2

Listen to the recording. Tick (✔) the sentences True or False.

		True	False
1	*Rose prefers fantasy and detective books.*	○	○
2	*Selim likes reading fantasy and sci-fi books.*	○	○
3	*Rose thinks biographical books are ridiculous.*	○	○
4	*Rose invites Selim to a book fair next week.*	○	○
5	*Selim knows the place and the date of the book fair.*	○	○

Note. In this activity, listening is in primary position. It is a non-reciprocal, comprehensive type of true-false activity in which the purpose of listening is inferential (listening in detail). Students are supposed to listen to the track and decide if the sentences are true or false by making inferences.

Moreover, 2 questions belonged to the (B,3) cell, which occupies 4% of the listening questions. This level (Webb's DOK Level 2; Bloom's Taxonomy, Apply) may require students to obtain and interpret information using text features. A representative sample of a listening activity placed in the (B,3) cell is shown in Figure 4.22. There were no more questions placed in the other (B) cells of the matrix.

Figure 4. 22. Sample (B,3) type of listening activity in "*Mastermind*"

Activity 2

Listen to the recording. Write the names of the extreme sports.

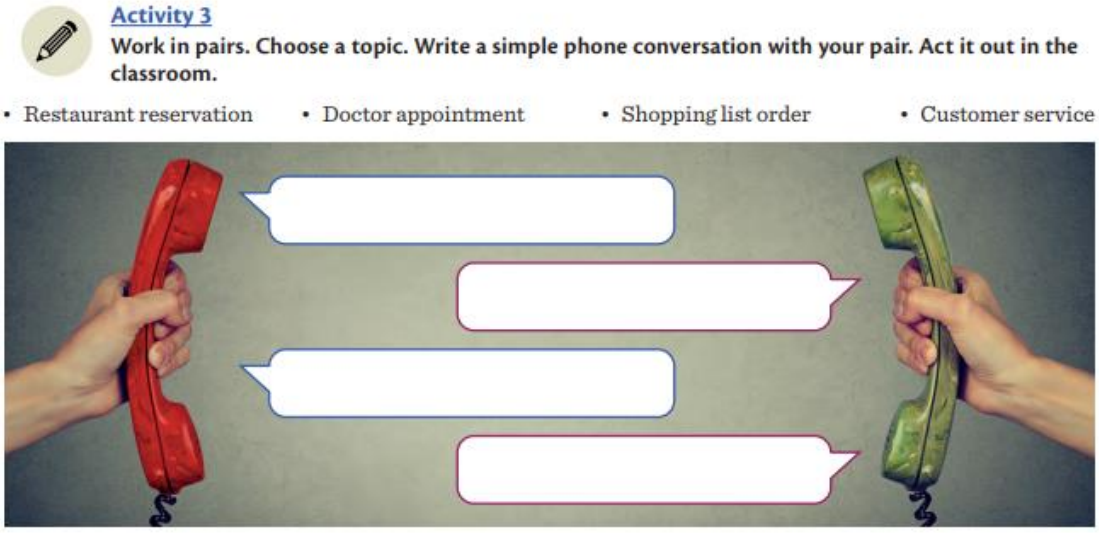
canoeing caving hang-gliding kayaking rafting skateboarding

	Equipment Lists	Extreme Sports
1	*A helmet/ a paddle/ dry-suits/ a wetsuit*	
2	*A skateboard/ a helmet/ elbow pads/ knee pads/ wrist guards*	
3	*A kayak/ a paddle/ a life jacket/ a spray skirt/ a helmet*	
4	*A helmet/ clothing/ a footwear/ socks/ gloves/ a torch/ a cave pack*	
5	*A helmet/ a wetsuit/ booties/ a paddle/ a raft/ a life jacket*	
6	*Wings/ flight instruments/ a helmet/ flight suits*	

Note. In this activity, listening is in primary position. It is a non-reciprocal, comprehensive type of chart filling activity in which the purpose is listening for literal meaning (listening in detail). Students are supposed to listen to the track and write the name of the correct extreme sport by interpreting the information given in the chart and the listening track.

There were only 15 questions in the (C) cells of the matrix, all of which belonged to the (C,2) cell with a 28% percentage. At this level (Webb's DOK Level 3; Bloom's Taxonomy, Understand), students are often required to explain, generalize, or connect concepts using supporting evidence (quote, example, textual reference) (Hess, 2009).

Figure 4. 23. Sample (C,2) type of listening activity in "*Mastermind*"



Note. In this activity, listening is in secondary position integrated with speaking and writing. It is a reciprocal, comprehensive type of role play activity in which the purpose listening is inferential (listening in detail). Students are supposed to work in pairs, do some brainstorming and write a dialogue to be acted out in the classroom later. After choosing a topic, they may generalize and connect their ideas to form their own conversation.

Finally, there is no single question in the (D) cells of the HCRM. The density plot shown in Figure 4.24. visualizes the distribution of cognitive rigor of all the listening activities in *Mastermind*. Moreover, the numbers of listening activities for each HCRM cell is shown in Figure 4.24. below.

Figure 4. 24. Density plot visualizing the distribution in each cell of the HCRM for all of the listening activities in "*Mastermind*".

Revised Bloom's Taxonomy	Webb's Depth of Knowledge			
	A *Recall & Reproduction*	**B** *Skills & Concepts*	**C** *Strategic Thinking & Reasoning*	**D** *Extended Thinking*
1 *Remember*	7			
2 *Understand*	16	7	15	
3 *Apply*		2		
4 *Analyze*	2			
5 *Evaluate*				
6 *Create*	4			

2.1 To what extent do the listening activities of Mastermind include questions at the LOTS level?

The Hess Cognitive Rigor Matrix assigns the lowest level of cognitive complexity to Level 1, which requires students to simply recall and reproduce facts and key ideas, terms, details, events, etc. Items requiring only a superficial understanding of the text displayed consist of verbatim recall, minor paraphrasing of specific details from the text, or comprehension of a single word or phrase (Webb et al., 2005, p. 70). The researcher used the following codes derived from the Hess Cognitive Rigor Matrix to represent the lowest level of cognitive complexity: (A,1), (A,2), (A,3), (A,4), and (A,6).

Furthermore, Level 2 thinking was represented by the following codes: (B,1), (B,2), (B,3), (B,4), (B,5), and (B,6). The first and second levels of Webb's DOK represented in HCRM were considered as lower-order thinking. 38 questions out of a total of 53 were classified as lower-level questions, representing 72% of the questions that were examined and analyzed.

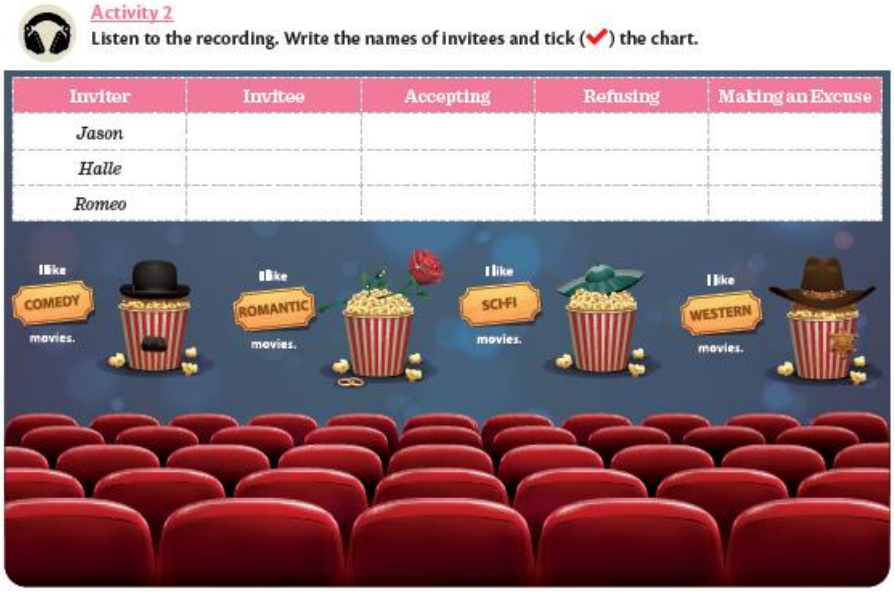
Figure 4. 25. A representative sample of LOTS from "*Mastermind*"

Note. This is an example of an (A,1) activity that belonged to *Remember* (Revised Bloom's Taxonomy) and *Recall and Reproduction* (Webb's DOK Level 1). For this activity, students are required to retrieve information from long-term memory, recall, identify, and locate information while listening.

Another example of listening activity that represents lower-order thinking skills was shown in Figure 4.25. above. It is an example of a (B,2) activity that belonged to Understand (Revised Bloom's Taxonomy) and Skills and Concepts (Webb's DOK Level 2). For this task, students are supposed to make basic inferences or logical predictions from data or texts.

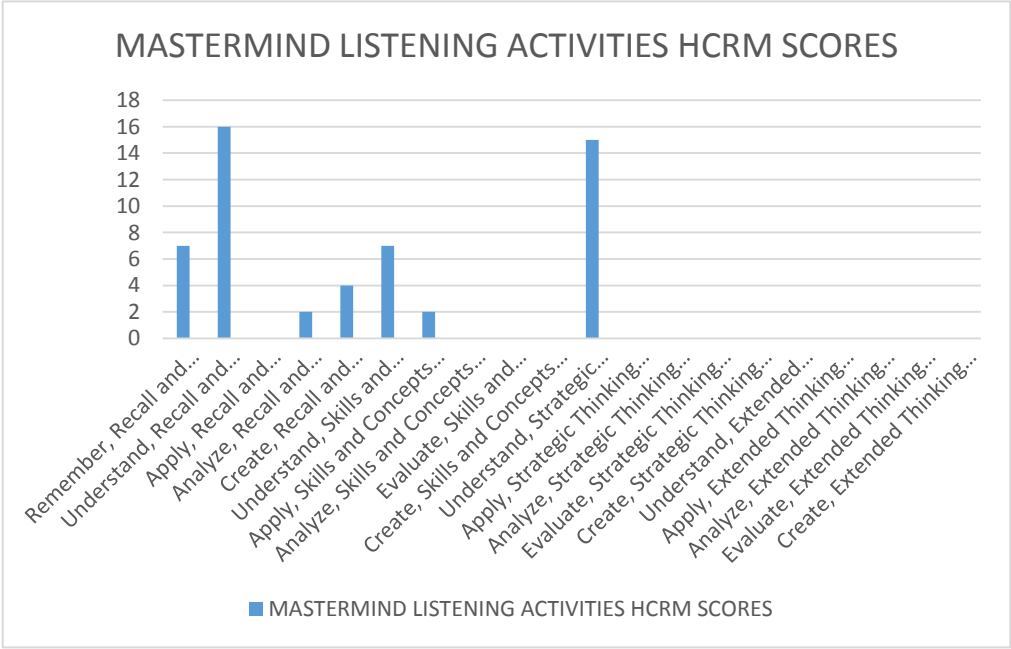
For *Apply* skill to be fulfilled while listening, students are supposed to perform or use a procedure in a given circumstance; perform (apply to a familiar task) or use (apply to an unfamiliar task) a procedure. Just one of the while-listening activities in the coursebook *Mastermind* belonged to this cell of the HCRM as in the following example:

Figure 4. 26. Sample (B,3) type of listening activity in "*Mastermind*"



Note. For this (B,3) task, which represents *Apply* (Bloom's Taxonomy) and *Skills and Concepts* (Webb's DOK Level 2), students are required to obtain and interpret information using text features.

Figure 4. 27. Numbers of listening activities for each HCRM cell



2.2 To what extent do the listening activities of Mastermind include questions at the HOTS level?

According to the Webb Alignment Tool, Levels 3 and 4 require analysis of texts, use of prior knowledge, and abstract or critical thinking. According to the Webb Alignment Tool, Levels 3 and 4 require text analysis, use of prior knowledge, and abstract or critical thinking to understand and represent the language of higher-level thinking (Webb et al., 2005, p. 70–71). The codes identified at Level 3 are (C,2), (C,3), (C,4), (C,5), and (C,6). Level 4 codes were (D,2), (D,3), (D,4), (D,5), and (D,6). 15 out of 53 listening activities in *Mastermind* include HOTS level question types, all of which were in the (C,2) cell. These questions require students to interpret what they hear or infer extra linguistic information, which is typically expected of more proficient learners.

On the other hand, listening activities situated in the third and fourth levels of Webb's DOK would be regarded as higher-order thinking for the second research question. Therefore, higher-order thinking categories were coded as (C,2), (C,3), (C,4), (C,5), (C,6), (D,2), (D,3), (D,4), (D,5), and (D,6). 15 questions out of a total of 53 were classified as higher-level questions, representing 28% of the questions that were examined and analyzed.

Table 4. 6. The frequency of LOTS and HOTS in "*Mastermind*"

Thinking Skills	**Number**	**Percentage**
LOTS	38	72 %
HOTS	15	28 %

4.4. Discussion on Findings for Research Question 2

Each listening activity extracted from the coursebook was analyzed and classified through the lens of Hess' Cognitive Rigor Matrix (HCRM) tool for reading and listening. This theoretical framework used for the second research question was constructed by merging Bloom's Taxonomy and Webb's Depth of Knowledge. By integrating Webb's Depth of Knowledge and Bloom's Taxonomy, the evaluation of listening activities could be evaluated on both the level of comprehension demanded and the complexity of the task (Olivero, 2020). It generates a holistic model that can stimulate higher-order thinking by integrating the cognitive complexity of tasks and activities with actions (Hess et al., 2009). As a result, the HCRM is an instrument grounded in research that is employed to ascertain,

for every inquiry, the critical competencies required for college and career readiness in the twenty-first century (Esdale, 2018).

This study reveals that most of the listening activities in the ELT coursebook *Mastermind* for 8th grade promote lower-order thinking (72%), while the 28% minority promote higher-order thinking (see Table 4. 4.). Significantly, research indicates that students were tasked with identifying and describing factual information pertaining to a given concept for the majority of the listening activities included in the coursebook (Hess, 2009). A bare minority of activities required students to obtain and interpret information by identifying text features and distinguishing whether particular information is presented in a visual or textual format. These results are consistent with the claim that lower-order thinking questions are used more frequently than higher-order thinking questions in materials and examinations (i.e., Baghaei et al., 2019; Santos, 1968; Zareian et al., 2015).

The findings for the second research question indicate that most of the activities included in this study are designed to lead students to use simple skills while listening rather than supporting them to think critically while using higher-order thinking skills. This pattern of results is consistent with the previous literature stating that both higher-order and lower-order questions can be useful for activating students' schemas (Wilson, 2008). However, the national curriculum claims to adhere to Cummins' (1984) model, which promotes a transition in language and literacy skill development from cognitively undemanding to cognitively demanding, context-embedded tasks, advancing from familiar to novel topics (TTKB, 2018). Moreover, it has been argued that to ensure that students are adequately prepared for lifelong learning, educators and administrators must commence by conducting a comprehensive evaluation and revision of existing curricula to incorporate essential critical thinking skills (Burns, 2017). However, students may develop functional fixedness, or the perception that an entity serves a single purpose, if they are subjected to an excessive number of lower-level questions (Anderson & Johnson, 1966). This can impede the growth of their abilities to think critically (Olivero, 2020).

On the other hand, it has been clearly stated that when students are able to transfer their learning to new or more complex situations, they are more likely to acquire skills and knowledge (National Research Council, 2001). Listening tasks that guide students through the listening process by engaging them in the use of prediction, monitoring, evaluating, and problem-solving can also aid in the development of metacognitive knowledge, which is

essential for the development of self-regulated listening (Vandergrift, 2007). When students are consistently taught specific problem-solving strategies, methods, and formulas, they lose the ability to think creatively and/or design original solutions (Olivero, 2020). In this case, teachers must provide all students with challenging tasks and high-stakes objectives, structure learning so that students can achieve these objectives, and promote both surface and profound learning of content (Hattie, 2002).

Listening comprehension is a challenging aspect of second language acquisition, influenced by factors such as lack of familiarity, processing speed, diverse accents and dialects, cognitive load, lack of visual cues, and lack of control (Gass & Selinker, 2008). Learners may struggle to keep up with the rapid processing of natural speech, which can complicate their comprehension. Many SLA (Second Language Acquisition) researchers, including Gass and Selinker (2008), stress how important it is to give students lots of chances to listen to real audio, interact with others, and learn how to deal with the difficulties of listening in a second language. Gaining better listening skills takes time, and it is beneficial to have both proper training and authentic language input. When confronted with real-life scenarios that require the use of the target language, language learners benefit from active listening. Active listening involves concentrating, understanding, responding, and remembering information, requiring critical thinking skills. It aids in comprehending complex ideas and arguments, identifying strengths, weaknesses, and logical fallacies. Critical thinkers use active listening to understand nuances, identify biases, and engage in productive dialogue, challenging assumptions and exploring solutions to complex problems.

In addition to active listening, using effective listening skills serve as a functional component of Interactional Competence (IC) as introduced by Long (1996). By actively listening to others, learners can enhance their comprehension, engage in meaningful communication, negotiate meaning effectively, participate in conversations, adapt to different contexts, and provide appropriate feedback and responses, ultimately contributing to their overall interactional competence in the target language. This present study, therefore, can be seen as a first step towards integrating cognitive and knowledge dimensions of listening activities found in an ELT coursebook provided and developed by MoNE in a Turkish educational setting, encouraging future research to focus on other language skills.

CHAPTER V
CONCLUSION

This chapter provides a conclusion along with a summary of the study, followed by the pedagogical implications of the study for the ELT field, including teachers, coursebook writers, and curriculum developers. The limitations of the present study and recommendations for further research are presented at the end.

5.1. Summary of the Study

This study used a combination of qualitative content analysis and descriptive statistics to investigate all of the listening activities found in the 8th grade MoNE ELT coursebook *Mastermind*. There were two main research questions within the scope of this study. The first research question was: *What are the kinds of listening that the students engage with listening activities included in the 8th grade coursebook "Mastermind" published by the Ministry of National Education?* To be able to answer the first research question, all 53 listening activities were extracted from the coursebook and analyzed in terms of their position (i.e., primary or secondary), listening processing model (i.e., bottom-up, top-down, interactive), role of listener (i.e., reciprocal or non-reciprocal), type of listening (i.e., discriminative, comprehensive, critical, evaluative, appreciative), task type (i.e., multiple choice, sequencing, brainstorming, editing, etc.), and purpose of listening (i.e., listening for gist, listening for specific information, listening in detail for literal or inferential meaning).

The findings for the first research question revealed that listening was in the primary position in 59% of the activities, whereas in 41%, listening was in the secondary position (integrated with reading, speaking, or writing). One of the most crucial findings was that all the activities where listening was in the primary position were non-reciprocal. In parallel, if listening is integrated with other skills in one activity (i.e., listening-speaking), that activity is always reciprocal in the coursebook. This finding was also predictable due to the fact that students are most likely to interact with each other when they need to listen to each other while speaking during the activity.

Moreover, the listening activity types were categorized in relation to the first research question. The findings indicated that the discriminative listening type was the most frequently utilized, whereas critical listening was the least prevalent. The percentages were presumed, although the coursebook lacked any form of appreciative listening activity. On the other hand, the task types exhibited a significant level of diversity, as there were eleven distinct types of tasks seen among the 53 listening exercises in the coursebook.

Hess' Cognitive Rigor Matrix (HCRM) was chosen to support the investigation of the answers to the second research question because it assists teachers in implementing what cognitive rigor might look like in the classroom and guides test developers in designing test items and performance tasks (Esdale, 2018). Reading and Listening CRM was used to evaluate 53 listening activities in order to specify the extent to which listening activities promote higher-order or lower-order thinking skills. Activities on the first level of Webb's Depth of Knowledge (*Recall & Reproduction*), which has minimal cognitive complexity, and the second level (*Skills & Concepts*) are categorized as low-level because they do not lead to deeper thought. Level 3 (*Strategic Thinking & Reasoning*) and Level 4 (*Extended Thinking*), which represent the highest degree of cognitive complexity, are regarded as higher-order because they essentially require students to apply more complex thought processes and expand their understanding beyond the question.

This case study utilized a combination of qualitative content analysis and descriptive statistics as part of its research methodology to examine the second research question: *What is the extent to which cognitive levels of Bloom's Revised Taxonomy and knowledge dimensions of Webb's Depth of Knowledge are represented in listening activities in Mastermind?* The researcher and the consultant coder applied deductive category application in accordance with Mayring (2000) in order to classify each question into the appropriate cell of the Hess Cognitive Rigor Matrix. A matrix was allocated to each cell based on Webb's depth of knowledge and Bloom's taxonomy levels. For the purpose of establishing reliability, the data collection procedures, including the double-rater read-behind consensus model and Webb Alignment Tool calibration, were compared to previous research employing comparable methods.

This study revealed that 72% of the listening activities promote lower-level thinking, and 28% of the activities promote higher-order thinking skills. Additionally, 7 out of 53 questions are associated with the (A,1) cell, which represents Webb's DOK Level 1 and

Bloom's Taxonomy. Remember. 16 questions belong to the (A, 2) cell of the HCRM, which means Webb's DOK Level 1 and Bloom's Taxonomy Understand. 2 of the listening activities belong to the (A,4) cell, which represents Webb's DOK Level 1 and Bloom's Taxonomy Analyze. 4 of the activities in the coursebook are placed in (A,6), which shows Webb's DOK Level 1 and Bloom's Taxonomy Create. 7 out of 53 listening activities are in the (B,2) cell of the matrix, which represents Webb's DOK Level 2 and Bloom's Taxonomy Understand. Finally, 2 listening activities belong to the (B,3) cell of the HCRM, which shows Webb's DOK Level 2 and Bloom's Taxonomy Apply. All these cells in the HCRM (for reading and listening) are the representatives of LOTS (lower-order thinking skills). According to the findings of the second research question, only 15 out of 53 listening activities in the coursebook *Mastermind* show the characteristics of HOTS (higher-order thinking skills), and these activities are in the (C,2) cell of the matrix. This cell represents Webb's DOK Level 3 and Bloom's Taxonomy Understand. There are no questions categorized in Webb's DOK Level 4 (Extended Thinking) nor in Evaluate from Bloom's Taxonomy.

All the findings considered, the majority of the listening activities in the 8th grade ELT coursebook prepared by the Ministry of Education promoted lower-order thinking. The coursebook analyzed in this study was claimed by the Curriculum of National Education as providing "readers and writers with the skills they need to meet the challenges of today's rigorous assessment requirements." Analyzing the listening activities from an 8th-grade ELT coursebook of MoNE, *Mastermind*, reveals that this claim was proven to be misleading, indicating a discrepancy between the marketing and the questions and duties presented to students. The majority of the listening activities prepared according to this program are of a lower difficulty level, as indicated by the findings.

An overabundance of lower-level activities can hinder the development of deeper thinking in students and lead to functional fixity (i.e., "the rigidity or mental set that prevents an individual from considering alternatives" (Runco & Chand, 1995, p. 247)), or the perception that an entity has only one function (Anderson & Johnson, 1966). Students are not given the opportunity to consider alternative solutions and to think creatively when solving problems. However, when students are consistently taught specific problem-solving strategies, methods, and formulas, they lose the ability to think creatively and/or design original solutions (Olivero, 2020).

5.2. Pedagogical Implications for ELT Teachers, Coursebook Writers, and Curriculum Developers

On the basis of the findings and conclusions of the study, the following pedagogical implications are drawn:

EFL teachers can be advised to teach listening comprehension skills in order to improve students' critical thinking skills because learning effective listening techniques might be helpful outside of language classes (Bailey, 2020). Providing students with guidance on how to strategically approach listening exercises enhances their self-assurance in authentic listening situations, despite the fact that the preplanning strategies they have learned are not entirely applicable to situations requiring prompt and spontaneous solutions to comprehension challenges (Field, 2012).

Through the process of investigating and identifying difficulties in listening comprehension among language learners, instructors can gain insight into the situations in which their pupils may encounter difficulties. This enables them to provide students with knowledge regarding the essential and crucial knowledge and abilities required to enhance their listening capabilities (Şahin, 2015). When students are routinely instructed in predetermined problem-solving strategies, methods, and formulas, their capacity for creative thinking and the generation of original solutions is diminished (Olivero, 2020). To ensure that students are adequately prepared for lifelong learning, educators and administrators must commence by conducting a comprehensive evaluation and revision of existing curricula to incorporate essential critical thinking skills (Burns, 2017).

Bloom's Taxonomy and Webb's Depth of Knowledge serve important functions in educational research. HCRM encompasses the complexity of content, cognitive engagement with it, and the scope of planned learning activities. It can also enhance instructional and assessment practices at the classroom level. As educators become more skilled at recognizing cognitive rigor and analyzing its implications for instruction and assessment, they can enhance learning opportunities for all students across all subject areas and grade levels. Schools should prepare students by providing them with a curriculum that spans a wide range of the cognitive rigor matrix.

Based on the findings of this research, some critical implications can also be drawn for coursebook writers. This study suggests that the authors of MoNE-supported EFL coursebooks should align the activities with the cognitive thinking levels promoting HOTS inside the coursebooks. Another suggestion can be to establish a coursebook adoption committee to seek out coursebooks that align with state standards and promote extended and higher-order thinking. Using the Hess Cognitive Rigor Matrix, committee members should evaluate sample coursebooks to ensure that tasks align with the framework's definition of higher-order thinking skills.

The current study may also have several implications for curriculum developers. In conjunction with the implementation of the coursebook program, effective professional development must be provided to all teachers on how to identify and encourage higher-order thinking. Teachers should have the opportunity to become familiar with the program's components and receive feedback on how to best implement the program. Throughout the various phases of the implementation process, continuous professional development and research should be provided. Effective professional development, according to Bull (1998), should be school-based, utilize mentoring and/or other follow-up procedures, be collaborative, be embedded in teachers' daily work, and focus on student learning.

It is critical to recognize that the existing curriculum model has a broad scope, encompassing millions of pupils and thousands of teachers in the case of Turkey. As a result, a standard English curriculum is insufficient for a successful English education. It calls for significant preparation and a detailed awareness of the school district's characteristics and demographics (TTKB, 2018). This allows administrators and teachers to effectively assess students' needs, expectations, and preparedness levels. As a result, the Curriculum of National Education for ELT program standards must be assessed and revised to incorporate skills that support optimal language learning.

Moreover, the information obtained by analyzing assessments, standards, curriculum, and instruction can be used to expand the research presented in this study. Using conceptual frameworks such as Hess' Cognitive Rigor Matrix, a replication of this study or other related studies could be conducted to advance the implementation of higher-order thinking in education. As the complexity of the knowledge required for global citizenship

increases, so must the systems by which we educate the next generation (Nehring et al., 2019).

5.3. Limitations of the Study and Recommendations for Future Research

The design of this study entails analyzing all the activities that include listening skills in the 8th-grade MoNE English coursebook, *Mastermind*, in many aspects (i.e., the position of listening, type of listening, the role of the listener, type of listening tasks, the cognitive levels of each activity, etc., so certain limitations of this study could be addressed in future research. To get a more comprehensive outcome, for instance, this research may be supplemented with the perspectives of both students and teachers. Also, the researcher chose to focus on this particular coursebook because of the researcher's own comfort level as a teacher who uses this book concurrently. While the National Curriculum was examined and referred to in this study, a thorough examination of the other ELT coursebooks created by the Ministry of Education and intended for different grade levels is also necessary in order to gain a deeper understanding of the coursebook series as a whole and how it affects students in other grade levels.

This study raises district leaders' and teachers' awareness of the use of the Hess Cognitive Rigor Matrix, Webb's Depth of Knowledge, and Bloom's Taxonomy to develop alternative forms of thinking. Teachers require professional development in order to self-evaluate and analyze their practices, teachings, activities, and assessments in order to promote and develop higher-order thinking skills. Additionally, teachers must be given the opportunity to review the activities found in the coursebook and then augment those that are cognitively complex. If the coursebook program is not being re-adopted, teachers must devise strategies to promote and cultivate alternative modes of thinking. By comparing the activities presented at various grade levels, an examination of other grade levels could reveal similarities and differences in the frequency and proportion of higher-order questions posed to students. In addition, further research involving all four skills (listening, speaking, reading, and writing) would help determine which skill-based activities promote critical thinking via the use of higher-order thinking activities.

This study's primary objective was to determine the frequency and proportion of higher-order questions promoted in an ELT coursebook for eighth grade provided by

MoNE. The study could be extended to investigate the impact of this coursebook on other factors, such as the National High School Entrance Exam. In terms of future research, it would be useful to extend the current findings by examining the questions provided by the coursebook and by the teacher in the classroom environment. Additional research analyzing the effect of questioning on student achievement could provide valuable information regarding the efficacy of the coursebook.

As a result, the current study adds to the expanding corpus of evidence indicating that the Ministry of Education's designed and developed materials should be subjected to systematic and routine analysis. This is particularly crucial given the substantial number of students and teachers they target throughout the country. This study has contributed to a greater understanding of several characteristics that impact listening outcomes. Nevertheless, there is still a need for additional research on the listening process itself, employing methodologies that examine the extent to which listening activities foster higher-order thinking skills.

REFERENCES

Adams, N. E. (2015). Bloom's taxonomy of cognitive learning objectives. *Journal of the Medical Library Association: JMLA*, 103(3), 152–153. https://doi.org/10.3163/1536-5050.103.3.010

Adelmann, K. (2012). The Art of Listening in an Educational Perspective. *Education Inquiry*, *3*(4), 513–534. https://doi.org/10.3402/edui.v3i4.22051

Ahmed, M., Yaqoob, H., & Yaqoob, M. (2015). *Evaluation of Listening Skill of ELT Textbook at Secondary School Level.* Advances in Language and Literary Studies, 6(3), 225-229. Retrieved from http://www.journals.aiac.org.au/index.php/alls/article/view/1537/1482

Almeida, P. A. (2010). Questioning patterns, questioning profiles and teaching strategies in secondary education. *International Journal of Learning*, 17(1), 587-600.

Amrani, F. (2011). The process of evaluation: a publisher's view. In B. Tomlinson (ed.), *Materials Development in Language Teaching*, 2nd edn (pp. 267–95). Cambridge: Cambridge University Press.

Anderson, L.W. & Krathwohl, D. (Eds.). (2001). *A taxonomy for learning, teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives.* New York, NY: Longman.

Anderson, A., & Lynch, T. (1998). *Listening*. Oxford: Oxford University Press.

Anderson, B., & Johnson, W. (1966). Two kinds of set in problem solving. *Psychological Reports*, 19 (3, Pt. 1), 851-858. Doi: 10.2466/pr0.1966.19.3.851

Arıkan, G. (2008). *Textbook evaluation in foreign language teaching: Time for English, grade 4 teachers' and students' views* [Master's thesis, Çukurova University]. http://libratez.cu.edu.tr/tezler/6892.pdf

Armbruster, B. B., & Ostertag, J. (1989). Questions in elementary science and social studies textbooks. *Center for the Study of Reading. Champaign, Illinois: University of Illinois at Urbana-Champaign*. http://hdl.handle.net/2142/17741

Asher, J. (1988). *Learning another language through actions: The complete teacher's guidebook.* 3rd ed. Los Gatos, CA: Sky Oaks Productions.

Assaly, I. & Smadi, O. (2015). Using Bloom's Taxonomy to Evaluate the Cognitive Levels of Master Class Textbook's Questions. *English Language Teaching.* 10.5539/elt.v8n5p100.

Bailey, K. M. (2020). *Teaching Listening and Speaking in Second and Foreign Language Contexts.* Bloomsbury Publishing.

Barba, R, & Cardinale, L. (2010). Are females invisible students? An Investigation of TeacherStudent Questioning Interactions. *School Science and Mathematics*, 91, 306 - 310.

Bloom, B. S. (Ed.). Englehart, M.D., Furst, E.J., Hill, & W.H., Krathwohl, D.R. (1956). *Taxonomy of educational objectives, Handbook I: The cognitive domain.* New York, NY: David McKay.

Bowen, G. A. (2009). *Document analysis as a qualitative research method.* Qualitative Research Journal, 9(2), 27-40.

Breen, M. & C. Candlin (1987). Which materials? A consumer's and designer's guide. In L. E. Sheldon (ed): *ELT Textbooks and Materials: Problems in Evaluation and Development*, ELT Documents 126. London: Modern English Publications/ The British Council, 13–28.

Broughton, G., Brumfit, C., Pincas, A., & Wilde, R. D. (2002, September 11). *Teaching English as a Foreign Language.* Routledge. https://doi.org/10.1604/9780203412541

Brown, G., & Yule, G. (1983). *Discourse analysis.* Cambridge, England: Cambridge University Press.

Brown, G. (1987). Twenty-five years of teaching listening comprehension. *English Teaching Forum*, 25, 11–15.

Brown, G. (1990). *Listening to spoken English.* Harlow: Longman.

Brown, K. L. (2003). From Teacher-Centered to Learner-Centered Curriculum: Improving Learning in Diverse Classrooms. *Education*, 124, 49-54.

Buck, G. (2001). *Assessing Listening*. Cambridge University Press.

Bull, B. (1998). ATE newsletter, 32(6), 4.

Byrd, P. (2001). Textbooks: Evaluation for selection and analysis for implementation. In

Caravaca, R. V. (2019). Effective questioning in CLIL classrooms: empowering thinking, *ELT Journal*, 73(4), 367–376. https://doi.org/10.1093/elt/ccz030

Celce – Murcia, M. (Ed.), *Teaching English as a second or foreign language*. (pp. 415 – 427) Heinle & Heinle.

Churches, A. (2008). Bloom's Digital Taxonomy. http://edorigami.wikispaces.com

CIEL Language Support Network. (2000). *Resources for independent language learning: design and use.* Retrieved 31 March 2010 from www.llas.ac.uk/resources/gpg/1405

Coburn, C., & Edge, A. (2007). Listening to each other: the heart of mediation and dialogue (Version 1). *La Trobe*. https://doi.org/10.26181/22200997.v1

Conklin, W. (2011). *Higher-order thinking skills to develop 21st century learners.* Teacher Created Materials.

Council of Europe (2001). *A common European framework of reference for languages: Learning, teaching, assessment.* Cambridge: Cambridge University Press.

Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. Clevedon, England: Multilingual Matters.

Cunningsworth, A. (1984). *Evaluating and Selecting EFL Teaching Materials.* Oxford: Heinemann.

Cunningsworth, A. (1995). *Choosing your coursebook*. Oxford: Heinemann Publishers Ltd.

Demir, S. (2008). *An evaluation of thinking skills in ELT coursebooks at primary and secondary levels: Teachers' point of view.* [Master's thesis, Çukurova University] http://libratez.cu.edu.tr/tezler/6892.pdf

Dornyei, Z. (2007). *Research Methods in Applied Linguistics.* Oxford: Oxford University Press.

Duffy, G., Miller, S., Howerton, S. & William, J. (2010). Comprehension instruction: Merging two historically antithetical perspectives. In D. Wyse, R. Andrews, & J. Hoffman (Eds.) *The Routledge international handbook of English, language and literacy training* (pp. 58–73). New York: Routledge.

Eisner, E. W. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice.* Toronto: Collier Macmillan Canada.

Eken, D. T., & Dilidüzgün, K. (2014). The Types and the Functions of the Listening Activities in Turkish and English Course Books1. *Procedia - Social and Behavioral Sciences, 152,* 989–994. https://doi.org/10.1016/j.sbspro.2014.09.355

Elley, W. (2000). The potential of book floods for raising literacy levels'. *International Reineui of Education,* 46:3/4, 233-255.

Ellis, R. (1997). *The Empirical of evaluation of language teaching materials.* ELT Journal 51 (1) 36-42.

Ennis, R. (1985). A definition of critical thinking. *The Reading Teacher 17(8),* 599-612.

Esdale, R. (2021). *An analysis of higher-order thinking requirement of the 2018 PSAT/NMSQT* [Doctoral thesis, Seton Hall University]. https://scholarship.shu.edu/dissertations/2955

Færch, C., & Kasper, G. (1983). Plans and strategies in foreign language communication. In C. Færch & G. Kasper (Eds.), *Strategies in interlanguage communication* (pp. 20–60). Harlow, UK: Longman.

Febrina, F., Usman, B. & Muslem, A. (2019). Analysis of reading comprehension questions by using revised Bloom's taxonomy on higher order thinking skill (HOTS). *English Education Journal (EEJ), 10*(1), 1-15.

Field, J. (2003). Promoting perception: lexical segmentation in L2 listening. *ELT Journal* 57, 4: 325–334.

Field, J. (2008). *Listening in the language classroom.* Cambridge, UK: Cambridge University Press.

Fischer, C., Bol, L., & Pribesh, S. (2011). An Investigation of Higher-Order Thinking Skills in Smaller Learning Community Social Studies Classrooms. *American Secondary Education, 39*(2), 5–26. http://www.jstor.org/stable/23100399

Fisher, A. (2001, 2nd ed. 2011). *Critical Thinking: An Introduction*. Cambridge University Press.

Flowerdew, J., & Miller, L. (2005). *Second Language Listening.* Cambridge University Press.

Garinger, D. (2002). Textbook selection for the ESL classroom. *ERIC Digest.*

Gass, S. M., & Selinker, L. (2008). *Second Language Acquisition: An Introductory Course (3rd ed.)*. Routledge. https://doi.org/10.4324/9780203932841

Goh, C. C. M. & Hu, G. (2014). Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness, 23*(3): 255–274. https://doi.org/10.1080/09658416.2013.769558

Goh, C. C. M., & Vandergrift, L. (2012). *Teaching and Learning Second Language Listening*. Routledge.

Graves, K. (2000). *Designing Language Course, A Guide for Teachers.* Boston. Heinle. Cengage Learning.

Goktepe, F. T. (2015). An evaluation of two ESP coursebooks using revised Bloom taxonomy. *The Online Journal of New Horizons in Education, 5(1),* 1-8.

Gu, Yongqi. (2018). *Types of Listening.* https://doi.org/10.1002/9781118784235.eelt0570

Haghani, E. & Soori, A. (2015). Textbook Evaluation: An Analysis of Listening Comprehension Parts in Top Notch 2A & 2B. *Advances in Language and Literary Studies, 6*(5). https://doi.org/10.7575/aiac.alls.v.6n.5p.183

Hale, S. L., & Cunningham, S. A. (2011). Evidence based practice using a thematic based unit for language development. Paper presented at the Texas Hearing Speech Language Association (TSHA) Annual Convention, Houston, TX.

Hampton, D., Krentler, K., & Martin, A. (1993). The use of management and marketing textbook multiple-choice questions: A case study. *Journal of Education for Business, 69*(1), 40-43. http://dx.doi.org/10.1080/08832323.1993.10117654

Harmer, J. (2007). *How to Teach English.* Pearson Education Limited.

Hattie, J. (October 2002). "What are the attributes of excellent teachers?" Presentation at the New Zealand Council for Educational Research Annual Conference, University of Auckland.

Hess, K. (2014). *The New Basal Readers: What Levels of Comprehension Do They Promote?* National Center for Assessment/NCIEA.

Hess, K. K., Jones, B. S., Carlock, D., & Walkup, J. R. (2009). *Cognitive rigor: Blending the strengths of Bloom's taxonomy and Webb's depth of knowledge to enhance classroom level processes.* Retrieved from ERIC database.

Hess, K. (2018). *A local assessment toolkit to promote deeper learning: Transforming research into practice.* Thousand Oaks, CA: Corwin

Hinkel, E. (2006). Current perspectives on teaching the four skills. *TESOL Quarterly* 40.1, 109.131.

Hinkel, E. (2018). Teaching speaking in integrated-skills classes. *TESOL Encyclopedia of English Language Teaching*. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1002/9781118784235.eelt0256

Hoeppel, F. C. (1980). *A taxonomical analysis of questions found in reading skill development books used in Maryland Community College developmental/remedial reading programs.* [Doctoral dissertation, The American University]. University Microfilms International.

Hsieh H-F, Shannon SE. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research, 15*(9):1277-1288. doi:10.1177/1049732305276687

Hutchinson, T., & Torres, E. (1994). The textbook as agent of change. *ELT Journal, 48*(4), 315-328.

Hutchinson, T. & Waters, A. (1987). *English for specific purposes: A learning-centred approach.* Cambridge: Cambridge University Press.

Huong, N. G. (2018). Textbook evaluation an analysis of listening in q2: skills for success listening and speaking for English-major freshmen at Hufi. *ELT Upgrades 2018: A Focus on Fluency*. https://doi.org/10.5281/zenodo.3354975

Ibrahim, F. (1998). *Curricula foundations, organizations, and Evaluation*. Cairo: Egypt Library.

Ilham, N. W., Jabu, B. & Korompot, C. A. (2020). Analysis of higher-order thinking skills (Hots) items in senior high school English national examination 2019. *ELT Worldwide, 7*(2), 156-162. 10.26858/eltww.v7i2.14764.

İlköğretim İngilizce Dersi (4, 5, 6, 7 ve 8. Sınıflar) Öğretim Programı – English Language Curriculum for Primary Education (Grades 4, 5, 6, 7 and 8), (2018), Turkish Ministry of Education, The Committee of Education and Instruction, Ankara: Devlet Kitapları Müdürlüğü.

Ivie, S. D. (1998). Ausubel's Learning Theory: An Approach to Teaching Higher Order Thinking Skills. *The High School Journal, 82*(1), 35–42. http://www.jstor.org/stable/40364708

Jo, I., & Bednarz, S. W. (2011). *Textbook questions to support spatial thinking: differences in spatiality by question location.* Journal of Geography, 110(2): 70-80.

Kachru, B. (1992). World Englishes: Approaches, issues and resources. *Language Teaching, 25*(1), 1-14. doi:10.1017/S0261444800006583

Karalık, T. (2023). *Components of L2 listening comprehension: A componential model.* [Doctoral dissertation, Anadolu University].Anadolu University Research Information System.

Karns, J., Burton, G., & Martin, G. (1983). Learning objectives and testing: An analysis of six principles of economic textbooks using Bloom's taxonomy. *Journal of Economic Education, 14*(3), 16-20. http://dx.doi.org/10.1080/00220485.1983.10845021

Keshta, A. S., & Seif, A. (2013). Evaluating the Higher Order Thinking Skills in Reading Exercises of English for Palestine Grade Eight. *Asian Journal of Education and E-Learning*, 1(1). Retrieved from https://www.ajouronline.com/index.php/AJEEL/article/view/52

Kim, D. and Hall, J.K. (2002). The Role of an Interactive Book Reading Program in the Development of Second Language Pragmatic Competence. *The Modern Language Journal*, 86: 332-348. https://doi.org/10.1111/1540-4781.00153

Kiss, T. (2017). Investigating Teacher Questions within the Framework of Knowledge Building Pedagogy. *Journal of International Studies*, 7(1), 55-69.

Krashen, S. D. (1982). *Principles and practice in second language acquisition.* Oxford, England: Pergamon.

Krathwohl, D. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice, 41* (4), 212-218. Retrieved from http://www.unco.edu/cetl/sir/stating_outcome/documents/Krathwohl.pdf

Krippendorff, K. (2019). *Content analysis*. SAGE Publications, Inc.,https://doi.org/10.4135/9781071878781

Kuhn, D., & Dean, D. (2005). Is Developing Scientific Thinking All About Learning to Control Variables? *Psychological Science, 16*(11), 866-870. https://doi.org/10.1111/j.1467-9280.2005.01628.x

Lee, H. A. (2010). *Thinking levels in Christian publishers' elementary reading textbook questions* (Order No. 3398636). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (251299795).

Lee Mckay, S., & Brown, J.D. (2015). *Teaching and Assessing EIL in Local Contexts Around the World (1st ed.)*. Routledge. https://doi.org/10.4324/9781315769097

Llinares, A. & Morton, T. & Whittaker, R. (2012). *The roles of language in CLIL*.

Littlejohn, A. (1998). The analysis of language teaching materials: Inside the Trojan horse. In B. Tomlinson (Ed.). *Materials Development in language teaching* (pp: 190-216). Cambridge: Cambridge University press.

Littlejohn, A. (2011). The analysis of language teaching materials: inside the Trojan horse. In B. Tomlinson (ed) *Materials Development in Language Teaching*. 2nd edn. Cambridge: Cambridge University Press, 179–211.

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie and T. K. Bhatia (eds), *Handbook of Second Language Acquisition*. San Diego: Academic Press, 413–68.

Lopez, J. & Whittington, M. S. (2014). Higher-order thinking in a college course: a case study. *NACTA Journal, 58*(1), 73-80.

Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press. Maharani, R. N. (2019). *An analysis of reading questions in ELT textbook based on revised Bloom's taxonomy of learning domain*. [Master's thesis, Jember University]. Digital Repository Universitas Jember.

Mahmood, A., Mahmood, S. & Butt, M. W. (2020). Comparative study of English textbook I of federal and khyber pakhtunkhwa boards at SSC level: Application of Bloom's taxonomy. *Kashmir Journal of Languager Research, 23*(2).

Marlina, R. (2017). Practices of teaching Englishes for intercultural communication. In A. Matsuda (Ed.), *Preparing teachers to teach English as an international language* (pp. 100–13). Bristol, England: Multilingual Matters.

Martínez, S. (2010). Using Web Resources to Support Teachers and Students with the Teaching and Practice of Listening Comprehension. *Encuentro, 19*, pp. 20–31.

Mayring, P. (2000). Qualitative content analysis. Forum: Qualitative Social Research, p. 40.

McDonough, J. A., & Shaw, C. (1993). *Materials and methods in ELT: a teacher's guide*. Blackwell.

McDonough, J., Shaw, C., & Masuhara, H. (2013). *Materials and Methods in ELT*. John Wiley & Sons.

McGrath, I. (2002). *Materials Evaluation and Design for Language Teaching*. Edinburgh University Press.

McGuinness, C. (1999). *From Thinking Skills to Thinking Classrooms: A review and evaluation of approaches for developing pupils' thinking.* 10.13140/RG.2.1.4000.1129.

McTighe, J., & Wiggins, G. (2013). *Essential Questions.* ASCD.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA: Sage.

Mishan, F. & Timmis, I. (2015). *Materials Development for TESOL*. Edinburgh University Press.

Mrah, I. (2017). Developing higher order thinking skills: Towards a rethinking of EFL coursebooks in Moroccan high schools. *JELTL (Journal of English Language Teaching and Linguistics), 2(3),* 225-243. doi: http://dx.doi.org/10.21462/jeltl.v2i3.79

Nand, Kalpana & Baghaei, Nilufar & Casey, John & Barmada, Bashar & Mehdipour, Farhad & Liang, Hai-Ning. (2019). Engaging children with educational content via Gamification. *Smart Learning Environments*. 6. 10.1186/s40561-019-0085-2.

National Research Council. (2001). Pellegrino, J., Chudowsky, N., & Glaser, R. (Eds.) *Knowing what student know: The science and design of educational assessment.* Washington, D.C.: Academy Press.

Nehring, J.H., Charner-Laird, M., & Szczesiul, S.A. (2019). *Redefining excellence: Teaching in Transition, from test performance to 21st century skills.* NASSP Bulletin.

Newton, J. M., & Nation, I. (2009). *Teaching ESL/EFL Listening and Speaking.* Routledge.

Nix, J.-M. L. (2016). Measuring latent listening strategies: Development and validation of the EFL listening strategy inventory. *System, 57, 79–97.*

Nunan, D. (1998). *Language Teaching Methodolgy.* New York: Prentice Hall.

Nunan, D. (2002). Listening in language learning. In J. C. Richards & W. A. Renandya (Eds.) *Methodology in language teaching* (pp. 238-241). Cambridge: Cambridge University Press.

Olivero, S. (2020). The Type of Questions Being Promoted in a 3rd Grade Reading Textbook. *Seton Hall University Dissertations and Theses (ETDs).* 2833. https://scholarship.shu.edu/dissertations/2833

Ollmann, H. E. (1996). Creating Higher Level Thinking with Reading Response. *Journal of Adolescent & Adult Literacy, 39*(7), 576–581. http://www.jstor.org/stable/40017466

Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd edition). Saint Paul: Sage Publications, Inc.

Polly, D. (2011). Developing Students' Higher-Order Thinking Skills (HOTS) Through Technology-Rich Tasks: The Influence of Technological Pedagogical and Content Knowledge (TPACK). *Educational Technology, 51*(4), 20–26. http://www.jstor.org/stable/44429927

Qasrawi, R., & BeniAndelrahman, A. (2020). The higher and lower-order thinking skills (HOTS and LOTS) in Unlock English textbooks (1st and 2nd editions) based on Bloom's Taxonomy: An analysis study. *International Online Journal of Education and Teaching (IOJET), 7*(3). 744-758. https://iojet.org/index.php/IOJET/article/view/866

Razmjoo, S. A. & Kazempourfard, E. (2012). On the representation of Bloom's revised taxonomy in Interchange coursebooks. *The Journal of Teaching Language Skills (JTLS), 4(1),* 66/4.

Redfield, D. L., & Rousseau, E. W. (1981). A meta-analysis of experimental research on teacher questioning behavior. *Review of Educational Research, 51*(2), 237–245. https://doi.org/10.3102/00346543051002237

Renandya, W. A. (2019). *An analysis of the cognitive rigour of questions used in secondary school English language textbooks in Singapore*. AJELS.

Riazi, A. M., & Mosallanejad, N. (2010). Evaluation of learning objectives in Iranian high-school and pre-university English textbooks using Bloom's taxonomy. *TESL-EJ, 13(4),* 1-16.

Richards, J. C. (2001). The role of textbooks in a language program. Retrieved December 21, 2007, from http://www.professorjackrichards.com/pdfs/role-of-textbooks.pdf

Richards, J. C., & Burns, A. (2012). *Tips for teaching listening: A practical approach.* White Plains, NY: Pearson Education.

Richards, J. C., Tung, P., & Ng, P. (1992). The culture of the English language teacher: A Hong Kong example. *RELC journal, 23*(1), 81-102.

Richards, J. C. (2015). *Key Issues in Language Teaching.* Cambridge University Press.

Richards, J. C., & Renandya, W. A. (2002). *Methodology in Language Teaching.* Cambridge University Press.

Risner, G. P. & Nicholson, J. I. (1996). *The New Basal Readers: What Levels of Comprehension Do They Promote?* University of North Alabama.

Rost, M. (1990). *Listening in language learning.* Harlow: Longman.

Rost, M., & Ross, S. (1991). Learner use of strategies in interaction: Typology and teachability. *Language Learning*, 41,235-273.

Rost, M. (2015). *Teaching and Researching Listening: Third Edition (1st ed.).* Routledge. https://doi.org/10.4324/9781315732862

Rubdy, R. (2003). Selection of materials. In B. Tomlinson (ed.), *Developing Materials for Language Teaching*. London: Continuum.

Rumelhart, D. E. (1975). Notes on a schema for stories. In D. G. Brown & A. Collins (Eds.), *Representation and understanding: Studies in cognitive science*. New York: Academic Press.

Runco, M. A., & Chand, I. (1995). Cognition and creativity. *Educational Psychology Review*, 7(3), 243-267. Şahin, S. (2015). Pre-service EFL Teachers Perceptions on Listening Comprehension Problems. *Başkent University Journal of Education, 2*(1).

Şahin, S. (2019). *An analysis of English language testing and evaluation course in English language teacher education programs in Turkey: Developing language assessment literacy of pre-service EFL teachers*. [Doctoral thesis, Middle East Technical University].

Santos, N. A. (1968). *Provisions for Critical Reading in Philippine Basal Readers: An Analysis Of Reading Questions Based On A Classification Scheme Of Cognitive Skills* (Order No. 6906771). Available from ProQuest Dissertations & Theses Global. (302301541).

Sarısoy, B. (2023). *The impact of metacognitive instruction on listening comprehension performance, metacognitive listening awareness, and listening anxiety of EFL listeners at the territory level in Turkey.* [Master's thesis, Yıldız Technical University].

Sato, E., Lagunoff, R., & Worth, P. (2011). *SMARTER Balanced Assessment Consortium Common Core State Standards analysis: Eligible content for the summative assessment.* (Final Report). Retrieved from eric.gov?id=ED536959

Shang, H. F. (2005). An Investigation of Cognitive Operations on L2 Listening Comprehension Performance: An Exploratory Study. *International Journal of Listening, 19*(1), 51–62. https://doi.org/10.1080/10904018.2005.10499074

Sheldon, L. E. (1988). Evaluating ELT textbooks and materials. *ELT Journal, 42*(4), 237-246. https://doi.org/10.1093/elt/42.4.237

Simpson, A., Mokalled, S., Ellenberg, L. A., & Chu, S. M. (2014). A Tool for Rethinking Teacher's Questioning. *Mathematics Teaching in the Middle School, 20(5),* 294-302. https://www.jstor.org/stable/10.5951/mathteacmiddscho.20.5.0294

Stiggins, R. J., Griswold, M. M., & Wikelund, K. R. (1989). Measuring Thinking Skillsthrough Classroom Assessment. *Journal of Educational Measurement, 26*(3), 233–246. http://www.jstor.org/stable/1434989

Sydoruk, P. D. (2018). *An analysis of the higher order thinking requirements of a grade 8 online-based English language arts skills program*. [Doctoral dissertation, Seton Hall University]. ETDs. https://scholarship.shu.edu/dissertations/2495

Tienken, C.H., Goldberg, S., & DiRocco, D. (2010). Questioning the questions. *Education Digest: Essential Readings Condensed for Quick Review*, 75 (9), 28-32.

Tomlinson, B. (1998). *Material Development in Language Teaching.* Cambridge: Cambridge University.

Tomlinson, B. (2001). Materials development. In R. Carter, & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 66-71). Cambridge, UK: Cambridge University Press.

Tomlinson, B. (Ed.). (2003). *Developing materials for language teaching.* A&C Black.

Tomlinson, B. (2008). *English Language Learning Materials.* Bloomsbury Publishing.

Tomlinson, B. (2012). Materials development for language learning and teaching. *Language Teaching, 45*(2), 143-179.

Tomlinson, B. (2014). *Developing Materials for Language Teaching.* Bloomsbury Publishing.

Tsiplakides, I. (2011). Selecting an English Coursebook: Theory and Practice. *Theory and Practice in Language Studies, 1(7)*. https://doi.org/10.4304/tpls.1.7.758-764

Tucker, C. A. (1975). Evaluating beginning coursebooks. English Teaching Forum, 13/3/4:355- 61. Ulum, Ö. G. (2016). A Descriptive Content Analysis of the Extent of Bloom's Taxonomy in the Reading Comprehension Questions of the Course Book Q: Skills for Success 4 Reading and Writing. *The Qualitative Report.* https://doi.org/10.46743/2160-3715/2016.2172

Ur, P. (1996). *A Course in Language Teaching: Practice a Theory.* UK: Cambridge University Press.

Van Lier, L. (1979). Choosing a new EFL course. *Mextesol Journal*, *111*(3), 2-14.

Vandergrift, L. (1999). Facilitating second language listening comprehension: Acquiring successful strategies. *ELT Journal*, 53, 168–176.

Vandergrift, L. (2004). Learning to listen or listening to learn? *Annual Review of Applied Linguistics, 24,* 3–25.

Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching, 40,* 191-210. doi:10.1017/S0261444807004338

Watson, S. (2020). *Higher-order thinking Skills (HOTS) in education.* Retrieved from https://www.thoughtco.com/higher-order-thinking-skills-hots-education-3111297

Webb, N. (1997). *Research monograph number 6: Criteria for alignment of expectations and assessments on mathematics and science education.* Washington, D.C.: CCSSO.

Webb, N. L. (2005). *Webb Alignment Tool*. Training Manual. Wisconsin Center for Education Research.

Webb, N., Horton, M. & O'Neal, S. (2002). An analysis of the alignment between language arts standards and assessments for four states.

White, R. 1988. *The ELM Curriculum.* Blackwell.

Williams, D. (1983). Developing criteria for textbook evaluation. *ELT Journal, 37*(3), 251-261.

Wilson, J. J. (2008). *How to Teach Listening.* Pearson Longman.

Wolff, F.L., Marsnik, N.C., Tracey, W.S., & Nichols, R.G. (1983). *Perceptive listening*. New York: Holt, Rinehart and Winston.

Wolvin, A.D. & Coakley, C.G. (1996 [1982]) *Listening*. Boston, MA: McGraw-Hill.

Yazıcı, Y., & Hayta, P. (2021). An EFL Coursebook Evaluation in terms of Design and Language: Private School Samples in Sinop. *Uluslararası Türk Eğitim Bilimleri Dergisi, 2021*(16), 17-33. https://doi.org/10.46778/goputeb.789472

Yeldham, M., & Gruba, P. (2014). Toward an instructional approach to developing interactive second language listening. *Language Teaching Research,* 18(1), 33–53.

Zareian, G., Davoudi, M., Heshmatifar, Z. & Rahimi, J. (2015). An Evaluation of Questions in Two ESP Coursebooks Based on Bloom's New Taxonomy of Cognitive Learning Domain. *International Journal of Education and Research.* 3(8).

Zawilinski, L. (2009). HOT Blogging: A Framework for Blogging to Promote Higher Order Thinking. *The Reading Teacher*. 62. 10.1598/RT.62.8.3.

APPENDICES

Appendix 1: Ethics Committee Approval

Evrak Tarih ve Sayısı: 17.06.2022-137402

1993
BAŞKENT ÜNİVERSİTESİ
Akademik Değerlendirme Koordinatörlüğü

17.06.2022

Sayı : E-62310886-605.99-137402
Konu : Etik Kurul İzni (Müge Uzaldı)

EGITIM BILIMLERI ENSTITUSU MUDURLUGUNE

İlgi : 07.06.2022 tarih ve 133631 sayılı yazınız.

Enstitünüz İngiliz Dili Öğretimi Tezli Yüksek Lisans Programı öğrencisi Müge Uzaldı'nın, Dr. Öğretim Üyesi Sevgi Şahin danışmanlığında yürütmekte olduğu, "8. Sınıf İngilizce Ders Kitabı Materyalindeki İçerisindeki Dinleme Aktiviteleri ve Dinlediğini Anlama Sorularının Yenilenmiş Bloom Taksonomi ve Webb'in Bilgi Derinliği Boyutları Açısından İncelenmesi" adlı tezine ait tez önerisi değerlendirilmiş ve bilgilerinize ekte sunulmuştur.

Prof. Dr. M. Abdülkadir VAROGLU
Kurul Başkanı

Ek: Değerlendirme Formu

Evrak Tarih ve Sayısı: 17.06.2022-137402

Sayı : 17162298.600-170
Konu : Tez Önerisi

10 HAZİRAN 2022

İlgili Makama

Üniversitemiz Eğitim Bilimleri Enstitüsü İngiliz Dili Öğretimi Tezli Yüksek Lisans Programı öğrencisi Müge Uzaldı'nın, Dr. Öğretim Üyesi Sevgi Şahin danışmanlığında yürütmekte olduğu, "8. Sınıf İngilizce Ders Kitabı Mastermind İçerisindeki Dinleme Aktiviteleri ve Dinlediğini Anlama Sorularının Yenilenmiş Bloom Taksonomi ve Webb'in Bilgi Derinliği Boyutları Açısından İncelenmesi" adlı tezine ait tez önerisi değerlendirilmiş ve yapılmasında bir sakınca olmadığı tespit edilmiştir.
Bilgilerinize saygılarımızla sunarız.

Başkent Üniversitesi Sosyal ve Beşeri Bilimler ve Sanat Araştırma Kurulu

Ad, Soyad	Değerlendirme	İmza
Prof. Dr. M. Abdülkadir Varoğlu	Olumlu/~~Olumsuz~~	
Prof. Dr. Kudret Güven	Olumlu/Olumsuz	
Prof. Ali Sevgi	Olumlu/Olumsuz	
Prof. Dr. Işıl Bulut	Olumlu/Olumsuz	
Prof. Dr. Sadegül Akbaba Altun	Olumlu/~~Olumsuz~~	
Prof. Dr. Can Mehmet Hersek	Olumlu/~~Olumsuz~~	
Prof. Dr. Özcan Yağcı	Olumlu/~~Olumsuz~~	

Bu belge,güvenli elektronik imza ile imzalanmıştır.

Evrak Tarih ve Sayısı: 17.06.2022-137402

Prof. Dr. Sadegül Akbaba Altun, Üniversitemiz Eğitim Bilimleri Enstitüsü İngiliz Dili Öğretimi Tezli Yüksek Lisans Programı öğrencisi Müge Uzaldı'nın, Dr. Öğretim Üyesi Sevgi Şahin danışmanlığında yürütmekte olduğu, "8. Sınıf İngilizce Ders Kitabı Mastermind İçerisindeki Dinleme Aktiviteleri ve Dinlediğini Anlama Sorularının Yenilenmiş Bloom Taksonomi ve Webb'in Bilgi Derinliği Boyutları Açısından İncelenmesi" adlı tezin yapılabileceği görüşündeler.

Bu belge,güvenli elektronik imza ile imzalanmıştır.