

**T.C. KOCAELİ ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
YABANCI DİLLER EĞİTİMİ ANABİLİM DALI
İNGİLİZ DİLİ EĞİTİMİ BİLİM DALI**

**IN-SERVICE TEACHERS' BELIEFS, ATTITUDES,
PREFERENCES, AND ACTUAL PRACTICES REGARDING
MULTIMODAL INSTRUCTION IN DISTANCE EDUCATION –
A COMPARATIVE RESEARCH**

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Halil İbrahim ŞAHİN

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Dr. Öğr. Üyesi Mehmet ALTAY

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Tezi Hazırlayan: Halil İbrahim ŞAHİN

Tezin Kabul Edildiği Enstitü Yönetim Kurulu Karar ve No: 07.07.2021 / 16

Jüri Başkanı:

Jüri Üyesi:

Jüri Üyesi:

Jüri Üyesi:

Jüri Üyesi:

KOCAELİ 2021



To my future self

“Sapere aude”

ACKNOWLEDGEMENTS

I want to thank all my colleagues working in the city of Bolu who made this research possible. Also, I want to express my deepest gratitude for my supervisor Dr. Mehmet ALTAY for his continuous and invaluable support in the making of this paper



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ÖZET

Bu tezin temel amacı, öğretmenlerin, uzaktan eğitim derslerinde çok modlu öğretim kullanımlarının incelenmesidir. Araştırmada hem nicel hem de nitel yöntemler kullanılmıştır. İlk olarak, öğretmenlerin çok modlu öğretim tercihleri, tutumları ve görüşlerinin incelenmesi için Çok Katmanlı Okuryazarlık Ölçeğinden (Bulut et al., 2015) uyarlanan 24 maddelik Çok Modlu Öğretim Ölçeği, 46 İngilizce ve 104 de diğer branşlardan toplam 150 öğretmene uygulanmıştır. Buna ek olarak, verilerin triangülasyonunun sağlanması amacıyla, katılımcı öğretmenler arasından gönüllülük esasına dayalı olarak 20 İngilizce ve 16 da diğer branşlardan toplamda 36 öğretmen seçilerek bu öğretmenlerin dersleri kayıt altına alınmıştır. Verilerin güvenilirliğinin artırılması amacıyla, her bir öğretmenin farklı günlerde farklı sınıflara denk gelen toplam iki dersi Zoom programıyla kaydedilmiştir. Bu kayıtlar, Çok Modlu Öğretim Ölçeğine dayalı olarak geliştirilen Çok Modlu Ders Gözlem Envanteri ile incelenmiş, elde edilen veriler SPSS 21 nicel veri analizi programıyla analiz edilmiştir. Son olarak, gözlemlenen öğretmenler arasından gönüllülük esasına dayalı olarak 6 İngilizce, 10 da diğer branşlardan toplamda 16 öğretmen seçilerek, bu öğretmenlerle çevrim içi görüşmeler yapılmıştır. Yapılan bu görüşmeler daha sonra yazıya dökülerek Nvivo nitel veri analizi programıyla analiz edilmiştir. Ölçeklerden ve görüşmelerden elde edilen verilere göre hem İngilizce hem de diğer branş öğretmenleri, uzaktan eğitimde farklı semiyotik modların kullanım oranının oldukça yüksek olduğunu bildirmişlerdir. Ancak, öğretmenlerin beyanlarıyla gerçek uygulamaları karşılaştırıldığında, ikisi arasında tutarsızlık gözlemlenmiştir. Öğretmenlerin beyanlarına göre derslerde çok modlu öğretim kullanımı oldukça yüksekken, gerçek uygulamalara bakıldığında, derslerin %90'a yakın bir bölümünde çoğunlukla yalnızca bir mod (ör. sözlü mod) kullanıldığı görülmüştür. Son olarak, İngilizce ve diğer branş öğretmenleri arasında bir karşılaştırma yapıldığında ise, iki grup arasında çok modlu öğretim tercihleri, tutumları ve uygulamaları bağlamında, ölçekte 4 madde ve gözlemlerde 3 madde dışında anlamlı bir fark olmadığı görülmüştür.

Anahtar Kelimeler: çok modlu öğretim, multimedya temelli eğitim, sosyal semiyotik, göstergebilim, harmanlanmış öğrenme, uzaktan eğitim

ABSTRACT

The main aim of this thesis is to investigate the teachers' use of multimodality in their distance lessons. A mixed-methods approach was used in the research. Firstly, to examine the teachers' beliefs, attitudes, and preferences regarding multimodality, a 24-item scale (henceforth Multimodal Teaching Scale) that was adapted from the Multimodal Literacy Scale (Bulut et al., 2015) was administered to a total number of 150 teachers, namely 46 English teachers and 104 teachers of other school subjects. For triangulation of the data, observations of the lessons were done. In order to investigate the teachers' actual practices, a total number of 36 teachers, namely 20 English and 16 teachers of other school subjects were selected among the participants of the questionnaire on a voluntary basis. The lessons of these teachers were recorded via Zoom. To enhance the reliability of the video recordings, two different lessons of these teachers on two different occasions with two different classes were recorded. Observations of these recordings were done using the Multimodal Classroom Observation Checklist that was developed by the researcher based on the Multimodal Teaching Scale. The collected data were analyzed using SPSS 21 quantitative analysis tool. Finally, for interviews, 6 English and 10 other teachers were selected among the participants of the observations on a voluntary basis. The interviews were also recorded via Zoom and transcribed thereafter. The analysis of the transcriptions was done using Nvivo qualitative analysis tool. According to the questionnaire and interview data, both English teachers and the teachers of other school subjects reported intensive use of various semiotic modes in their distance lessons. However, when the actual lessons were examined, a discrepancy was observed between the teachers' statements and their actual practices. While the teachers stated that they used a wide variety of multimodal resources in their practice, in almost 90% of the lessons, only one mode of instruction (e.g. verbal mode) was used. Finally, the comparison between English teachers and the teachers of other school subjects yielded no significant results except for 4 items in the questionnaire and 3 items in the observation checklist.

Keywords: multimodality, multimedia based teaching, semiotics, social semiotics, blended learning, distance education

LIST OF ABBREVIATIONS

SLA: Second Language Acquisition

EFL: English as a Foreign Language

ELT: English Language Teaching

MoNE: The Ministry of National Education

EFA: Exploratory Factor Analysis

CFA: Confirmatory Factor Analysis

VARK: Visual, Auditory, Reading/Writing, Kinesthetic

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INTRODUCTION

In today's rapidly changing world, educational practices are also evolving with the developments in technology. It becomes a requirement for teachers to adopt new approaches to their instruction in order to keep up with the needs of the 21st century. In this vein, traditional methods and materials may be insufficient in responding to these needs. Integrating multimedia, web tools, the internet, or interactive content in the lessons seem inevitable since the students are already using these tools for meaning-making in their daily lives. Multimodality, a widely used term in today's academic circles, first started to appear in the late 1990s in different articles by various scholars (e.g. Goodwin, 2000; Kress & van Leeuwen, 2001). It is the utilization of different modes (i.e. visual, gestural, etc.) in meaning-making processes. If a *means for making meaning* is a *modality*, or *mode*, as it is usually called, then we might say that the term *multimodality* was used to highlight that people use multiple means of meaning-making (Jewitt et al., 2016). In our daily lives, we already engage in multimodal communications unconsciously: when we talk with people around us, we use words, body language, or gestures at the same time. Bateman et al. (2017) state that:

If you are watching a TV news program, where a presenter discusses some events backed up by textual overlays and recorded smartphone videos from the scene of those events, then you are interacting with a multimodal medium. If you are reading a book with diagrams and text, photographs and graphs, then you are also interacting with a multimodal medium (p. 8).

Surrounded by such multimodal environments, it might become a necessity for teachers to also take a multimodal turn in their lessons. In this research, the beliefs, preferences, attitudes, and actual practices of ELT teachers and the teachers of other school subjects regarding multimodality were investigated and compared. The results showed that monomodal instruction is more common than a multimodal one despite the teachers' statements that they use multimodality in their instruction intensively.

CHAPTER 1

1. INTRODUCTION

1.1. BACKGROUND TO THE RESEARCH

Throughout history, language education has undergone many fundamental phases and changes. In the 21st century, this evolution is much more visible. The tremendous developments in technology make it inevitable for the field of education to evolve, too. It does not seem feasible to hold on to the traditional ways. In the history of language education, the teachers of language have used many methods, approaches, and techniques in their practices. However, as Kumaravadivelu (1994) suggested, the whole concept of separate methods is no longer a central issue in language teaching practice. It has been a long-known fact that there is no single method that is suitable for all students and contexts. Instead of this, it is recommended by the researchers that the teachers should adopt an approach that is developed according to the unique atmosphere of each classroom. For example, Nunan (1991) emphasized this fact for language education as:

It has been realized that there never was and probably never will be a method for all, and the focus in recent years has been on the development of classroom tasks and activities which are consonant with what we know about second language acquisition, and which are also in keeping with the dynamics of the classroom itself (p.228).

Another issue to take into consideration is the modality preferences in teaching. Until recently, there had been a tendency towards monomodality in the field of education. Even still, there are many teachers who use only one medium or mode to deliver their lessons. The lessons strictly controlled by teachers' verbal lectures are not uncommon. As Kress and van Leeuwen (2001) emphasized, "there has been, in Western culture, a distinct preference for monomodality" (p.9).

A short definition of what a modality is (or mode/semiotic mode) would be *a set of socially and culturally shaped resources for making meaning* that has distinct *affordances* (Kress, 2014). Modes are the resources we use in our meaning-making processes, such as verbal resources (e.g. speech, intonation) visual resources (e.g. video recordings, paintings, charts), audial resources (e.g. audio recordings, songs),

and even bodily/kinesthetic/gestural resources (e.g. gestures, facial expressions, body language). On the other hand, these modes are rather content-specific. Something might be a mode to create meaning in a community, but not necessarily in another community. However, according to Bateman et al. (2017):

All accounts of semiotic modes that have been put forward in the literature tend to agree on one point: on the one hand, modes appear to have a material dimension, relating back to the sensory channels that are used to perceive them but, on the other hand, they also exhibit a semiotic dimension, i.e., the material used is given some kind of significance by its users.

Multimodality, a widely used term in today's academic circles, has gained popularity since its first appearance in the mid-1990s. A lot of researchers started to use the term in order to draw attention to the subject (O'Toole, 1994; O'Toole, 2010; O'Halloran, 1999; Kress & van Leeuwen, 1996; Goodwin, 2000; Kress & van Leeuwen, 2001; Kress & van Leeuwen, 2006; Baldry & Thibault, 2006; Bateman, 2008; Lemke, 2009). Some of these scholars suggested multimodality as a theory of language teaching. On the other hand, some of them accepted it as a practical application, rather than a theory. Jewitt (2009), for example, stated that "multimodality can be understood as a theory, a perspective or a field of inquiry or a methodological application". Since its first appearance, there has been a lot of research regarding multimodality. Especially recently, research about cognition and multimodality (Zheng et al., 2008), the impact of multimodality (Gilakjani et al., 2011; Limperos et al., 2014; Carcamo et al., 2016), teachers' beliefs, perceptions, and practices of multimodality (Ajayi, 2010; Yi & Choi, 2015; Ryu & Boggs, 2016; Papageorgiou & Lemeras, 2017; Carvalho, 2019; Tan & Matsuda, 2020), the concept of multimodality (Lyons, 2016), multimodal analysis (Sert & Walsh, 2012; Dooly, 2017), multimodal literacy (O'Halloran & Lim, 2011; Tüzel, 2013; Bulut et al., 2015, Ulu et al., 2017; Ulu & Tuncay, 2017), multimodality and social semiotics (Pink, 2011; Satar, 2020), and students' perspectives on multimodality (Li, 2020) has gained pace.

There has also been growing attention for multimodality in the Turkish context. In his action research, Tüzel (2013), for example, found out that the prospective teachers needed to develop new skills for Turkish Comprehension Techniques I: Reading Education integrated with multimodal literacy. Ekşi and Yakışık (2015)

investigated the prospective English language teachers' multimodal literacy and found out that pre-service English language teachers have quite high multimodal literacy levels. In another study, Bulut et al. (2015) developed a multimodal literacy scale. Using this scale, Ulu and Tuncay (2017) examined the multimodal literacy levels of pre-service teachers and found out that pre-service teachers use different modes (i.e. written, visual, audial) to express themselves and they can understand and prefer the content that contains these modes. Finally, Ulu et al. (2017) investigated the multimodal literacy levels of pre-service teachers. It was found out in the study that there is a positive correlation between multimodal literacy and critical reading skills.

In light of these information, the main motivation of this thesis is the gap in the literature regarding the in-service teachers' opinions, preferences, and actual practices of multimodality in the Turkish context. Another concern of this research is the comparison between the beliefs, attitudes, preferences, and actual practices of English Language Teachers and the teachers of other school subjects regarding multimodality.

1.2. STATEMENT OF THE PROBLEM

In the latest English Language Teaching Curriculum published by the Turkish Ministry of National Education (henceforth MoNE), there is a great emphasis on meaningful learning, real-life communication, and communicative competence in a broader sense. As stated in the curriculum published by the Board of Education and Discipline of Turkey (2018):

There is no question that the key to economic, political, and social progress in today's society depends on the ability of Turkish citizens to communicate effectively on an international level, and competence in English is a key factor in this process. In order for meaningful learning to take place, in English as in any other subject area, the material must have relevance to students' daily lives...Accordingly, in order to impress on students the role of English as a means of relaying needs and wants, voicing opinions and beliefs, building relationships, and so on, the new curricular model is focused on language learning as communication (p.4)

As Bateman et al. argued (2017), situations defined as multimodal are everywhere. If you are talking to a friend using your gestures or reading a book with

some pictures or diagrams on it, then you are interacting with a multimodal medium. On the basis of this fact, it is obvious that multimodality is everywhere in both teachers' and students' daily lives. There is also growing attention to approaching communication holistically rather than segmenting and compartmentalizing it. Bateman et al. (2017) stated: "the awareness is growing that it is not sufficient to focus on individual *forms of expression* within a communicative situation as if these forms were occurring alone". Therefore, it would be fair to say that multimodality is a skill that both teachers and students should develop to reach the competencies that were suggested in the curriculum of MoNE. Although teacher training programs at Turkish universities adopt multimodality in one way or another in their curriculum (Çelik, 2013), the subject deserves attention as a separate field. There has been much research on multimodality on an international basis. However, it is still an emerging field in the Turkish context, and the data are scarce. Most of the research in the Turkish context is concerned with the pre-service EFL teachers and specifically with their multimodal literacy skills (Ekşi & Yakışık, 2015; Bulut et al., 2015; Ulu et al., 2017; Ulu & Tuncay, 2017; Akayoglu et. al., 2020). Multimodality research on teachers of other school subjects (i.e. Tüzel, 2013) in the Turkish context is even scarcer. In addition, there is no satisfying research about in-service teachers' beliefs about multimodality, multimodal literacy skills, and actual practices either in the Turkish context or in the general literature. Within this direction, the purpose of this research is to investigate the actual practices of EFL teachers and the teachers of other school subjects in Turkey within the scope of multimodality in a comparative manner.

1.3. AIM OF THE RESEARCH

Without the knowledge of teaching strategies, methods, and techniques, educational practices would be blind. According to Sankey (2006), "learners are more comfortable learning in an environment that reflects their predominant learning style". In order to address different learning styles of different students, different means of teaching should be used because as Gilakjani et al. (2011) commented:

Learners have a preferred learning modality, namely, visual, aural, read/write, or kinesthetic, while many learners are multimodal (use a combination of these modalities). Multimedia can be used to develop a more inclusive curriculum

that appeals to visual, aural, and kinesthetic learners and overcome differences in student performance that may result from different learning styles.

There has been a lot of research proving the benefits of multimodal learning in terms of enhancing students' comprehension, learning, memory, communication, and inference (Scaife & Rogers, 1996), or encouraging them to develop a more versatile approach to learning (Morrison et al., 2003). Furthermore, according to Mayer (2005), "people learn better from words and pictures than from words alone". In addition, from a cognitive perspective, Sweller (2005) argues that the use of words and pictures lets the brain process more information in working memory. In light of this research, it seems inevitable for teachers to be equipped with the knowledge on multimodal instruction and to design their lessons accordingly. From a wider perspective, this research may lead the way for the political authorities to modify the curriculum that is administered in the schools.

The main aim of the current research is to highlight the importance of multimodal instruction and examine the teachers' level of using multimodality in their lessons. Teachers' were observed in the act and with the use of real-time data a comprehensive account of their practices in terms of multimodal instruction was gathered.

Secondly, this thesis aims to provide a detailed picture of the current situation in the schools of Turkish MoNE in terms of multimodal instruction. By doing this, it is expected to develop an awareness in the field in order for the Ministry to enhance and modify the curriculum across the country.

Lastly, an indirect purpose of this research is to create an interactive community among teachers to foster and enhance educational practices and disseminate the results in an action research manner.

1.4. SIGNIFICANCE OF THE RESEARCH

Multimodality has been around for many years now in western countries. However, there is not enough research on the subject in the Turkish context. The existing studies in the Turkish context focus mainly on preservice teachers and/or multimodal literacy, and the data on actual practices is missing. Therefore, this research is significant in terms of four important aspects.

Firstly, it examines the teachers in the act and provides real-time authentic data from actual lessons. Secondly, it is significant in that it compares the practices and beliefs of English Language teachers and the teachers of other school subjects in Turkey. Thirdly, the Multimodal Teaching Scale (Şahin, 2021) that was adapted from Multimodality Literacy Scale by Bulut et. al (2015) is notable in that it is developed as a ten-point Likert scale in order for the teachers to provide a better explanation of their opinions. Also, the scale is unique in exploring teachers' beliefs, attitudes, opinions, and preferences regarding multimodality rather than solely determining their level of multimodal literacy skills from an outsider look. The final highlight of the thesis is that in order to ensure triangulation, both qualitative and quantitative methods were used which provide a comprehensive account of the problem. To do this, another measurement tool (i.e. Multimodal Classroom Observation Checklist, Şahin, 2021) was developed based on the Multimodal Teaching Scale. The checklist is the pioneer in the literature to observe the actual lessons from a multimodal point of view.

1.5. ORGANISATION OF THE THESIS

This thesis consisted of six main chapters. In the first chapter, an introduction to the topic is made. Background to the research, statement of the problem, aim and the significance of the research are examined under this chapter. The second chapter gives a detailed overview of the literature on the subject, starting from the history of linguistics and narrowing it down to more specific fields of study such as semiotics under linguistics, social semiotics under semiotics, and multimodality under social semiotics. A brief summary of the hitherto research on multimodality is also given in this chapter. The third chapter presents the methodology of the research that is, research design, setting and participants, and data collection instruments. In the fourth chapter, findings of the research are examined. A summary of the research and the discussion of the findings are presented in the fifth chapter. In the final chapter, the thesis is concluded by the final remarks of the researcher, pedagogical implications, limitations of the research, and suggestions for future studies.

1.6. OPERATIONAL DEFINITIONS

Semiotics

The field of study that investigates the sign systems. It was called semiology by Saussure and semiotics by Peirce and the modern-day researchers. According to Sebeok (2001): “the primary objective of semiotics is to understand both a species' capacity to make and understand signs.” (p.8).

Social Semiotics

According to Halliday (1978), “social semiotics means interpreting language within a sociocultural context, in which the culture itself is interpreted in semiotic terms – as an information system”.

Multimodality

Multimodality is the utilization of various modes (e.g. visual, gestural) in meaning-making processes. Bateman et al. (2017) define multimodality as “a way of characterizing communicative situations (considered very broadly) which rely upon combinations of different *forms* of communication to be effective” (p.7).

Mode

A mode is a context-specific resource for meaning-making in our daily lives. Kress (2010) defines the mode as “a socially shaped and culturally given resource for making meaning. Image, writing, layout, gesture, speech, moving image, soundtrack are examples of modes used in representation and communication” (p.79).

CHAPTER 2

2. LITERATURE REVIEW

This chapter of the thesis focuses on the literature on Multimodality. Starting with a brief introduction to historical linguistics, the review continues to give detailed information about language as a semiotic system, social semiotics, multimodality, and multimodal analysis. Finally, the hitherto research on these topics were examined.

2.1 HISTORICAL LINGUISTICS

It has now long been recognized, especially since the works of Saussure (1916) and Peirce (1931), that language is not the only sign system in meaning-making. Instead, there are many sign systems other than language, such as gestures, images, and graphics. Siefkes (2015) emphasizes this fact:

Linguists have come to realize that language is neither the sole nor even the dominant sign system. Other sign systems such as gestures, images, graphics, typography have been in use for centuries, yet they were marginalized by philosophic reflection and scientific research due to the influence of linguocentrism, the tendency of Western cultures to privilege language, and downplay other sign systems and sign types. (p.113)

Saussure, in his *Cours de linguistique generale* (1916) defined the sign as a form made up (1) of something physical - sounds, letters, gestures, etc. - which he termed the signifier; and (2) of the image or concept to which the signifier refers - which he called the signified. According to Peirce, on the other hand, a sign consists of three components, namely representamen, object, and interpretant (as cited in Merrell, 2001, p.29). The field of study that investigates the sign systems was called semiology by Saussure and semiotics by Peirce and the modern-day researchers. According to Sebeok (2001): “the primary objective of semiotics is to understand both a species' capacity to make and understand signs.” (p.8).

The term semiotics has gone through many fundamental phases until the time of Saussure and Peirce. The first appearance of the term in history as a scientific subject is seen in the field of medicine. Hippocrates (460-377 B.C.) established *semeiotics* as a branch of medicine for the study of symptoms. The physician Galen of

Pergamum (A.D. 139-199) further entrenched semeiotics into medical practice several centuries later (Sebeok, 2001, p.4). The study of signs out of the field of medicine, on the other hand, became a subject of philosophers around the time of Aristotle (384-322 B.C.) and the Stoic philosophers. St. Augustine (A.D. 354-430) took the study of signs into a next step and make a clear distinction between natural and conventional signs. Locke (1690) introduced the formal study of signs into philosophy and defined semiotics as the *doctrine of signs* such as Peirce (1931) after him. Semiotics as a field of study has been divided into various sub-fields in time. Biosemiotics (Rothschild, 1962; Sebeok, 1992) or endosemiotics (Uexküll, 1993), the study of signs in the field of biology; cognitive semiotics (Daddesio, 1994), the study of the relationship between the signs and cognition; zoosemiotics (Sebeok, 1963), the study of signs in animals; phytosemiotics (Krampen, 1981), the study of signs in plants, and social semiotics (Halliday, 1978; Hodge & Kress, 1988) the study of semiotics in social practice, are examples of these sub-fields.

2.2 SOCIAL SEMIOTICS

In their daily lives, human beings are engaged in various semiotic activities. When they exchange words with their friends, laugh, smile, use body language and gestures, or when they read a newspaper or look at a painting, they are using the meaning-making mechanisms in their brains. A lot of scholars considered language as one of the main sign systems we use in these meaning-making processes (Saussure, 1983, p.15; Jakobson, 1970, p.455; Benveniste, 1969; Levi-Strauss, 1972, p.48; Cook, 2003, p.3). However, as Jewitt et al. (2016) stated:

1. The status of language varies across communities and contexts of use
2. Many *linguistic* principles are actually general semiotic principles, and
3. Each mode offers distinct possibilities and limitations.

In addition to that, language cannot be addressed without referring to the social aspects it entails, since “language is a social fact” (Saussure, 1983). As Halliday (1978) emphasizes, “language arises in the life of the individual through an ongoing exchange of meanings with significant others. It is a product of the social process”. When individuals start to learn a language, they also start constructing the reality around them which makes the reality and semiotics inseparable from each other. In this vein,

the study of semiotics in its social context gains importance. Halliday (1978) is one of the pioneers who introduced the term *social semiotics* into the field of linguistics. He stated that “social semiotics means interpreting language within a sociocultural context, in which the culture itself is interpreted in semiotic terms – as an information system”. According to Kress (2009):

The social semiotic theory is interested in meaning, in all its forms. Meaning arises in social environments and in social interactions. In semiotics, signs are the core elements of meaning-making processes. They exist in all modes so that all modes need to be considered for their contribution to the meaning of a sign complex (p.54).

As for the mode, there are various definitions by various researchers. According to Jewitt and Kress (2003), for example:

A mode is used to refer to a regularized, organized set of resources for meaning-making, including, image, gesture, movement, music speech, and sound-effect. Modes are broadly understood to be the effect of the work of culture in shaping the material into resources for representation (pp. 1-2).

Granström et al. (2002), on the other hand, states that “multimodality is the use of two or more of the five senses for the exchange of information” (p.1). Norris (2004) draws attention to the unclear nature of the modes and states that:

“[Communicative mode is a] heuristic unit that can be defined in various ways. We can say that layout is a mode, which would include furniture, pictures on a wall, walls, rooms, houses, streets, and so on. But we can also say that furniture is a mode. The precise definition of mode should be useful to the analysis. A mode has no clear boundaries (p.11).

Kress (2009), defines a mode as:

A socially shaped and culturally given semiotic resource for making meaning. Image, writing, layout, music, gesture, speech, moving images, soundtrack, and 3D objects are examples of modes used in representation and communication (p.79).

One year later, Kress (2010) in his book, made simple modifications in this definition and stated that:

[Mode is] a socially shaped and culturally given resource for making meaning. Image, writing, layout, gesture, speech, moving image, soundtrack are examples of modes used in representation and communication (p.79).

Pennock-Speck and del Saz-Rubio (2013) identified three main modes:

We can identify three main modes apart from the coded verbal language. Probably the most important, given the attention it gets in scholarly circles, is the visual mode made up of still and moving images. Another set of meanings reach us through our ears: music, diegetic and extradiegetic sound, paralinguistic features of voice. The third is made up of the very structure of the ad, which subsumes or informs all other levels, denotes and connotes meaning, that is, lecture-type ads, montage, mini-dramas (pp.13-14).

Jewitt (2014), on the other hand, made a brief definition of mode as image, writing, gesture, gaze, speech, and posture (p.1). Some other researchers also draw attention to the indefinite characteristic of modes. Jewitt et al. (2016) commented that:

There is, put simply, much variation in the meanings ascribed to mode and (semiotic) resource. Gesture and gaze, image and writing seem plausible candidates, but what about color or layout? And is photography a separate mode? What about facial expression and body posture? Are action and movement modes? You will find different answers to these questions not only between different research publications but also within (p. 12).

Forceville (2006) also emphasized the impossibility of giving either a satisfactory definition of *mode* or compile an exhaustive list of modes (p. 382). In the literature, various terms have been used to refer to the term mode. As Jewitt et al. (2016) stated:

Not everyone working in multimodality uses the notion of meaning-making. They might say that they are interested in ‘multimodal communication’, ‘multimodal discourse’, or ‘multimodal interaction. Nor does everyone

working in multimodality use the term ‘mode’: some people working in multimodality prefer to talk about ‘resource’, or ‘semiotic resource’ (p.3).

Therefore, henceforth in this thesis, the terms mode, modality, resource, or semiotic resource are used interchangeably.

2.2.1 Multimodality

Throughout the history of education, verbal means have been the main instruments in teaching. As Mayer (2009) stated, “for hundreds of years, verbal messages such as lectures and printed lessons have been the primary means of explaining ideas to learners”. In spite of the fact that verbal methods are powerful tools in delivering a lesson, in the age of technology, they might be insufficient. It is a long-known fact that language is not the only sign system in our meaning-making processes. As Siefkes (2015) emphasized, “language is neither the sole nor even the dominant sign system”. Other sign systems such as gestures, images, graphics, and typography have been in use for centuries. In addition, both in teachers’ and students’ daily lives, they are surrounded by various sign systems. Technological instruments, android phones, multimedia environments, TV programs, the internet, ads, pictures, graphics, diagrams, and music are all examples of these various sign systems. Multimodality is seen as a viable way in order to address these facts, meet the requirements of the 21st century, and develop modern literacy skills. As Bateman et al. (2017) emphasized:

The awareness is growing that it is not sufficient to focus on individual ‘forms of expression’ within a communicative situation as if these forms were occurring alone.... The range of places where issues of multimodality arise is also expanding rapidly and so it is increasingly rare that knowledge about one area will suffice (p.8).

Multimodality is the utilization of various modes (i.e. visual, gestural, etc.) in meaning-making processes. “If a *means for making meaning* is a *modality*, or *mode*, as it is usually called, then we might say that the term *multimodality* was used to highlight that people use multiple means of meaning-making” (Jewitt et al., 2016). Another subtle definition of multimodality would be:

A way of characterizing communicative situations (considered very broadly) which rely upon combinations of different ‘forms’ of communication to be effective—the TV program uses spoken language, pictures, and texts; the book uses written language, pictures, diagrams, page composition and so on; talking in the cafeteria brings together spoken language with a host of bodily capabilities and postures; and the computer game might show representations of any of these things and include movement and actions as well (Bateman et al., 2017, p.7)

2.2.1.1 Research on Multimodality

Research on multimodality has investigated the subject from various points of view including cognition and multimodality (Zheng et al., 2008), the impact of multimodality (Gilakjani et al., 2011; Limperos et al., 2014; Carcamo et al., 2016), teachers’ beliefs, perceptions, and practices of multimodality (Ajayi, 2010; Yi & Choi, 2015; Ryu & Boggs, 2016; Papageorgiou & Lemeras, 2017; Carvalho, 2019; Tan & Matsuda, 2020), the concept of multimodality (Lyons, 2016), multimodal analysis (Sert & Walsh, 2012; Dooly, 2017), multimodal literacy (O’Halloran & Lim, 2011; Tüzel, 2013; Bulut et al., 2015, Ulu et al., 2017; Ulu & Tuncay, 2017), multimodality and social semiotics (Pink, 2011; Satar, 2020), and students’ perspectives on multimodality (Li, 2020).

Ajayi (2010) investigated 48 preservice teachers in a state university in California in order to examine their knowledge and perceptions of their teacher education preparation to teach multimodality/multiliteracies. It was found out in the study that preservice teachers were aware of the impact of the new communication technologies on literacy forms, practices, knowledge, and literacy learning and instruction. The participants also commented on the constraints of schools and school districts.

Yi and Choi (2015) investigated 25 teachers in the USA for their views of multimodal practices in K-12 classrooms. They found out that 23 teachers out of 25 expressed positive opinions about the potential of multimodal practices. However, they also reported concerns about these practices such as the time needed to plan and implement multimodal lessons or a contradiction between multimodal instruction and

print-based evaluation. In conclusion, they suggested a critical gap between the theory of multimodal pedagogy and teachers' views of multimodal practices.

In another study by Ryu and Boggs (2016), teachers' perceptions about multimodality were investigated. Five teachers working at middle and high schools in South Korea were selected on the basis of purposeful sampling. According to the results of the study, teachers reported positive effects of multimodality on their students' motivation to write. They also commented that they were interested in the use of technology and various texts because traditional methods are ineffective in fostering learners' engagement. Congruent with the literature on multimodality (Hughes & Narayan, 2009; Thompson, 2008; Vasudevan et al., 2010), they emphasized that students are already engaged with multimodal texts and resources outside the classroom in their daily life. However, in traditional classrooms, monomodal means are being used. Teachers' also commented on their perceptions about student participation. According to their views, the students are more willing and excited about actively participating in cooperative activities and reflective learning.

In a study by Tan and Matsuda (2020), teachers' beliefs and practices of multimodality were examined. Nine graduate teaching assistants at a state university in the USA were investigated. It was found out that the participants showed a positive attitude towards multimodality and they made use of multimodal texts to foster their students' awareness, cultural sensitivity, critical thinking ability, and understanding of subject-matter knowledge. The participants also showed awareness of the pedagogical possibilities and potentials of using multimodal texts in writing classrooms.

As for the Turkish context, in his action research, Tüzel (2013) investigated prospective Turkish language teachers' views regarding multimodal literacy teaching and it was found out that the prospective teachers needed to develop new skills for Turkish Comprehension Techniques I: Reading Education integrated with multimodal literacy. 61 student teachers studying at Çanakkale 18 Mart University Turkish Teaching Department participated in the study. It was carried out between May 2nd and May 22nd, 2021, and it was found out that nearly all of the students do not have an awareness regarding the multimodal text structure. 47 of them reported that they had never heard of the term before, while 11 of them reported that they could not

remember whether they had heard or not. Two-third of the participants expressed positive opinions about the use of multimodal texts in Turkish lessons while the rest commented that multimodal texts should not be included in Turkish lessons. Nearly all of the participants reported that the education they had got at university regarding multimodal literacy had been insufficient.

On the other hand, Ekşi and Yakışık (2015) investigated the prospective English language teachers' multimodal literacy and found out that pre-service English language teachers have quite high multimodal literacy levels. Bulut et al. (2015) developed a multimodal literacy scale consisting of 17 items. Using this scale, Ulu and Tuncay (2017) examined the multimodal literacy levels of pre-service teachers and found out that pre-service teachers use different modes (written, visual, audial, etc.) to express themselves and they can understand and prefer the content that contains these modes. In addition, Ulu et al. (2017) investigated the multimodal literacy levels of pre-service teachers. It was found out in the study that there is a positive correlation between multimodal literacy and critical reading skills.

Finally, Akayoglu et. al. (2020) examined the digital literacy practices of Turkish pre-service EFL teachers. It was found out in the study that pre-service teachers were aware of many digital tools. They perceived themselves to be competent enough to use these digital tools for personal, educational, and professional purposes.

2.2.2 Multimodality and Current Applications

In the dawn of technology, with everything in the world changing and adapting to the needs of the 21st century, it is almost impossible for educational practices to keep out of this evolution. Traditional methods are being replaced by the 21st-century approaches, massive open online courses (MOOCs) are emerging as one of the most prominent trends in education (Baturay, 2015), the terms synchronous, asynchronous (Malik et al., 2017) or blended learning (Anthony et al., 2020) are being discussed more and more in educational circles, and e-learning is becoming a complementary agent for face-to-face education (Gherheş et al., 2021). In this vein, multimodality appears as one of the most significant operationalizing devices behind all of these novel approaches. To clarify, in an e-learning environment where students only sit and listen to the sound of teachers' voices just like in traditional classrooms, it is hard to

mention a modern teaching-learning context. Instead, a 21st-century classroom equipped with 21st-century instructional methods might be preferred.

There has been a growing body of research concerning the aforementioned applications. For example, Omwenga and Rodrigues (2006) developed a framework to evaluate an e-learning system. They concluded that e-learning is a sustainable and viable mode of the instructional process that promotes learner autonomy and learner choice about how, when, and where to study.

In his article Picciano (2009) suggested a refined model which he called *Blending with Purpose: The Multimodal Model*. The design proposes six basic pedagogical objectives and approaches for reaching these objectives. The objectives are matched with some technology or methods that need to be followed in order to achieve that objective. *Content* objective matched with CMS/media/muve tools, *social/emotional* objective matched with F2F education, *dialectic/questioning* objective matched with the discussion board activity, *synthesis/evaluation/assignments/assessment* objective matched with papers, tests, student presentations (PPT, Youtube), and e-portfolios, *collaboration/student-generated content* objective matched with Wiki tool, and finally *reflection* objective matched with blog and journal tools are the components of his model. In the conclusion, he states that:

Specifically, the Blending with Purpose: The Multimodal Model recognizes that because learners represent different generations, different personality types, and different learning styles, teachers and instructional designers should seek to try to use multiple approaches including face-to-face and online technologies to meet the needs of a wide spectrum of students (p. 13).

More recent research focused on the application of multimodality in e-learning environments. Sun (2015) in their experimental study, compared students in terms of whether multimodal instruction had a positive effect on learning or not. It was found out that multimodal learning was quite facilitative in increasing students' success in English in an online learning environment. Also, it was observed that multimodality enhanced the students' interests and self-confidence in learning English.

Finally, Gherheş et al. (2021) compared e-learning and face-to-face learning from students' perspectives. They listed the advantages and disadvantages of both contexts and concluded that both face-to-face education and online learning are irreplaceable. They are complementary to one another rather than replacement. They stated that since both methods have their own advantages and disadvantages, and since both students and teachers realized this fact, a complete return to face-to-face education might not be possible. Therefore, future educational applications might be more of a blended nature rather than just following a single way of instruction.

CHAPTER 3

3. METHODOLOGY

3.1. INTRODUCTION

In this chapter, the methodology of the research is presented. First, a detailed investigation of the overall research design is carried out. After that, research questions, settings and participants, data collection instruments, data collection procedure, and the data analysis are examined respectively.

3.2. RESEARCH DESIGN

In this research, a mixed-method approach was adopted, that is, both qualitative and quantitative research methods were used, since, as Dörnyei (2007) pointed out, mixed-methods research:

1. Increase the strengths while eliminating the weaknesses
2. Enable multi-level analysis of complex issues
3. Improve validity
4. Reach multiple audiences (p.45)

In the quantitative phase of the thesis, a questionnaire was administered since the questionnaire design is especially facilitative when dealing with a large population

in a limited period of time. As Dörnyei and Taguchi (2010) emphasized, “questionnaires are advantageous in terms of researcher time, researcher effort, and financial resources” (p.6). In the qualitative phase, to observe the teachers’ use of modality, video recordings of the lessons were collected and to further examine the teachers’ views, interviews were conducted. To clarify, this research followed an explanatory sequential design, that is, firstly, the quantitative phase of the research was carried out and after this, the qualitative phase of the research was done in order to further elaborate on and explain the results of the quantitative investigation. As Creswell (2011) stated:

An explanatory sequential mixed methods design (also called a two-phase model; Creswell & Plano Clark, 2011) consists of first collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results. The rationale for this approach is that the quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection, is needed to refine, extend, or explain the general picture (p. 542).

3.3. RESEARCH QUESTIONS

Since the research concerning the beliefs, preferences, attitudes, and most importantly the actual practices of the teachers towards multimodality in the Turkish context is scarce, motivated by this gap in the literature, the research questions of this thesis are:

1. What are the English Language Teachers’ beliefs, preferences, and attitudes regarding multimodality?
2. How are their actual practices according to the observations?
3. What are the beliefs, preferences, and attitudes of the teachers of other school subjects regarding multimodality?
4. How are their actual practices according to the observations?
5. Are there any significant differences between the beliefs, preferences, attitudes, and actual practices of the two groups regarding multimodality?

3.4. SETTING AND PARTICIPANTS

The current research was carried out during the 2020-2021 educational year in Bolu province. Participants of the research were selected from the English Language Teachers and the teachers of other school subjects such as Mathematics, Science, Turkish, Religion and Ethics, and Social Studies who are working at different levels of state schools, namely primary, secondary and high schools in Bolu province. For the questionnaire, 150 teachers of various school subjects were selected on the basis of convenience sampling. According to Friedman (2012), “convenience sampling is the selection of participants from an audience that is accessible to the researcher at the time”. In addition, in this research, a multilingual approach was adopted, that is, both the English Language and the mother tongue of the participants, which is Turkish, were used. A multilingual approach is especially facilitative in terms of building rapport with the participants, using multiple sources of data (both from Turkish and English resources), and opening a broader mindset for the researcher to use the linguistic resources. As Andrews et al. (2020) aptly pointed out, multilingualism in research:

1. Helps researchers develop relationships of varying kinds during the research with their collaborators and participants,
2. Opens up possibilities of exploring literature in more than one language,
3. Opens up even more opportunities, and accompanying complexities, in the data gathering, generation, analysis, and representation stages,
4. Helps researchers maintain an open mind about their use of linguistic resources in their research (pp. 78-84).

The participants of the research consisted of teachers from primary school (n=37), secondary school (n=78), and high school levels (n=35). 44.7% of the participants had 15+ years of working experience (n=67), which was followed by the teachers with 10-15 years of experience (n=55) with a percentage of 36.7%, 5-10 years of experience (n=26) with a percentage of 17.3% and 0-5 years of experience (n=2) with a percentage of 1.3. English teachers who participated in the research (n=46) formed 30.7% of the participants, while the teachers of other school subjects (n=104) formed 69.3% of the participants. In Table 1, descriptives of the quantitative research were presented.

Table 1.

Descriptives of the Questionnaire (n=150)

		N	%
Working Level	Primary	37	24.7
	Secondary	78	52.0
	High	35	23.3
Years of Experience	0-5	2	1.3
	5-10	26	17.3
	10-15	55	36.7
	15+	67	44.7
Field of Study	English	46	30.7
	Mathematics	9	6.0
	Social Sciences	6	4.0
	Science	12	8.0
	Turkish	11	7.3
	Religion and Ethics	7	4.7
	Other	59	39.3

On the other hand, the qualitative investigation of the research consisted of two parts: video recordings of the lessons and interviews. In the first part 36 teachers were observed in 72 lessons while in the interviews 16 teachers participated. These teachers were selected among the participants of the first part on the basis of volunteering. In Table 2, descriptives of the qualitative research are presented.

Table 2

Descriptives of the Qualitative Research (n=36)

		n	%
Working Level for Video Recordings	Primary	4	11.1
	Secondary	25	69.4
	High	7	19.4
Field of Study for Video Recordings	English	20	55.6
	Mathematics	2	5.6
	Social Sciences	3	8.3
	Science	5	13.9
	Turkish	4	11.1
	Religion and Ethics	2	5.6

Frequencies for Interviews (n=16)	English	6	37.5
	Mathematics	2	12.5
	Social Sciences	2	12.5
	Science	2	12.5
	Turkish	2	12.5
	Religion and Ethics	2	12.5

3.5. DATA COLLECTION INSTRUMENTS

Since the current research followed an explanatory sequential mixed-methods design, both qualitative and quantitative tools were used for data collection. In this part of the chapter, data collection tools were presented in the same sequential manner as the research. Firstly the questionnaire that was used in the quantitative phase, secondly the video recordings and the observation checklist that was used to evaluate the video recordings, and finally the interviews were explained.

3.5.1 Questionnaire

In the quantitative part of the research, the Multimodal Teaching Scale (Şahin, 2021) that was adapted from the Multimodal Literacy Scale by Bulut et al. (2015) was used. During the adaptation process mainly the principles proposed by Dörnyei and Taguchi (2010) were followed. It was carried out as an internet survey since “they are becoming the predominant mode of conducting surveys, superseding paper-based surveys” (Cohen et al., 2018, p. 361). Internet surveys are becoming more and more popular because of the advantages they hold against the traditional way of surveying. These advantages include lower cost, faster data collection, access to wider and much larger populations and samples, overcoming spatial and temporal constraints, a larger volume of data, and ease of response (Cohen et al., 2018, p.362).

The original version of the scale by Bulut et al. (2015) was developed as a 5-point Likert scale. It was written in Turkish language and consisted of 17 items (See Appendix A for the Multimodal Literacy Scale). To develop a multimodal literacy scale for prospective teachers, the study was conducted at a state university in Turkey with 392 undergraduate students who attended various departments in the Faculty of

Education at that university. At the end of the EFA and CFA, 3 factors were calculated, which explained 52.63% of the total variance. These factors were:

1. Expressing oneself using the multimodal structure
 - Item numbers: 1, 2, 3, 4, and 5
2. Interpretation of the contents presented in the multimodal structure
 - Item numbers: 6, 7, 8, 9, 10, 11, and 12
3. Preferring multimodal structures
 - Item numbers: 13, 14, 15, 16, and 17

On the other hand, the Multimodal Teaching Scale consisted of 24 items. It was organized as a variety of Likert scales and consisted of 10 points. As Dörnyei and Taguchi (2010) clarified:

Original Likert scales contained five response options, but subsequent research has also used two-, three-, four-, six-, and seven-response options successfully. It is fair to say that there is no absolute standard for the number of response options to be used on Likert scales (and on rating scales in general)... Some researchers prefer using an even number of response options because of the concern that certain respondents might use the middle category (“neither agree nor disagree,” “not sure,” or “neutral”) to avoid making a real choice. (p.28).

In the Multimodal Teaching Scale, participants rated their responses on a scale of 10 points: 1 meaning not suitable for me, 10 meaning totally suitable for me (See Appendix B for the Multimodal Teaching Scale). During the adaptation process, 4 of the items, namely 8th, 9th, 10th and 11th items, from the original scale were removed due to being unsuited for the purposes of this thesis. All of these items were related to the second factor which is the interpretation of the contents presented in multimodal structure. Since, the focal point of this research is the investigation of actual multimodal teaching practices of the teachers rather than determining the level of their multimodal literacy skill, these items were inconvenient for the explanation of the research questions. 13 items left in the original scale after the removal of the inconvenient ones. Since some of the items (e.g., 1st, 4th, and 5th or 3rd and 14th) are seen as complementary for each other, writing validity items for those seemed

redundant. Therefore, only the items without a complementary item were reinforced by a complementary item.

As mentioned above, throughout the adaptation process of the questionnaire, mainly the principles suggested by Dörnyei and Taguchi (2010) were followed. First of all, this questionnaire was borrowed from an already established questionnaire since “the questions that have been used frequently before must have been through extensive piloting” (Dörnyei & Taguchi, 2010, p. 40) and therefore “most of the bugs will have been ironed out of them” (Sudman & Bradburn, 1983, p. 117). In addition, when possible, the majority of the items that contain statements with the first person singular wording were transferred into neutral sentences using passive voice.

Throughout the item writing process, I consulted specialists and non-specialists in order to get their opinions about the items and make modifications accordingly. In terms of complexity, I preferred shorter items when possible, since they work better than longer items, as well as positively worded items rather than negatively worded ones. However, since “in order to avoid a response set in which the respondents mark only one side of a rating scale, it is worth including in the questionnaire both positively and negatively worded items” (Dörnyei & Taguchi, 2010, p.43), I tried to include a balanced mixture of both positively and negatively worded items as much as possible.

In this process, I tried to transfer negatively worded items into positive ones using negative adjectives without losing the meaning of the original item. Furthermore, the statements with *sharp edges* were rounded into milder statements. An example of this is the 16th item in the original questionnaire. The statement *using visual, auditory and written resources together causes mental laziness* was transformed into *using visual, auditory and written resources together could cause mental laziness*.

Finally, in order to ensure the reliability of the questionnaire and to avoid and detect random responses, all of the items were double-checked for whether they were reinforced with opposite-worded counterparts. Eventually, a 24-item questionnaire was obtained. The piloting of the questionnaire was carried out online as an internet survey with 150 teachers working at different schooling levels in Bolu province. In addition, since the current research is a multi-lingual investigation, the questionnaire was translated to both Turkish and English language and administered to both Turkish

and English speaking teachers. Descriptives regarding the questionnaire were given in Table 1.

3.5.2 Video recordings of the lessons

The second part of the research, which is the qualitative phase, can be examined under two headings. The first of these headings is the observation of video recordings of the lessons from various teachers. In the second part of the qualitative phase, interviews were carried out for examining teachers' voices on multimodality and elaborate more on the results of the collected data. As Friedman (2012) stated, "the most common methods of qualitative data collection in SLA research include observations, audio or video recordings, and various form of data elicitation, such as interviews, open-ended questionnaires, and journals" (p.185).

The procedure of the recordings is discussed in detail in the following lines. In order to get a deeper examination of the context where the actual teaching takes place, 40 hours of lessons from 20 English teachers working at different schooling levels (i.e., primary, secondary, and high school levels) of state schools in Bolu Province were recorded. To compare the differences in the practices between English language teachers and the teachers of other school subjects such as Mathematics, Science, Turkish, Religion and Ethics, and Social Studies, 32 hours of lessons from 16 teachers of these subjects were also recorded. The lessons were recorded via Zoom a web-based tool for online conferencing. In order to enhance the reliability, every teacher was recorded at two different times, teaching in two different classes.

In order to observe the recordings, a checklist (i.e. Multimodal Classroom Observation Checklist) was developed based on the Multimodal Teaching Scale (Şahin, 2021), on the general teaching practices in the Turkish context, and finally on the literature on multimodality discussed in the current paper so far. The checklist examines the lessons in terms of six different modes/designs, namely linguistic design, textual design, visual design, audial design, technological design, and gestural design. These modes/designs were then divided into three sub-items each. Finally, at the bottom of the checklist an empty space was allocated for the comments of the researcher (See Appendix C for the Multimodal Classroom Observation Checklist).

3.5.3 Interviews

As mentioned above, interviews are one of the most common methods of qualitative data collection. They are especially facilitative in terms of elaborating on the results of the previous quantitative data and of providing deeper insights into the research questions. Since the biggest criticism aimed at questionnaires is their being very superficial (Iwaniec, 2020), in order to expand our understanding of a particular topic, interviews might be beneficial. As Hochschild (2009) noted, “the interviews can accomplish what surveys cannot. They can explain issues in a deeper sense, show why people form their opinions in the ways they do, how and why they make connections between behaviors, opinions, and values”. Furthermore, they can be used “to cast further explanatory insight into survey data, or indeed to set up a survey” (Cohen et al., 2018, p.506). Therefore interviews are powerful instruments in doing research. In light of such information, semi-structured interviews were carried out for the qualitative part of this research. According to Braun and Clarke (2019),

Semi-structured interviews are the dominant forms for qualitative interviews. In this approach, the researcher has prepared an interview guide before the interview but does not rigidly adhere to it, either in terms of the precise wording of questions, or the order in which questions are asked. (p.78).

Five main questions covering five main themes were prepared around which interviews were conducted. However, during the interviews, in order to establish cooperation, rapport, and relationship with the interviewee, the conversations were maintained in a more informal manner rather than strictly following the previously prepared criteria. As Cohen et al. (2018) commented, “the interviewer is responsible for establishing and maintaining a good rapport with the interviewee. This can be done by being clear, polite, non-threatening, friendly, and personable, to the point without being too assertive” (p. 518). In the preparation phase of the interview questions, mainly the principles by Friedman (2012) were followed, which are minimizing the use of closed-ended (i.e., yes/no) questions, avoiding leading questions, avoiding complex questions that ask about several things at once, considering whether the questions will be comprehensible to interviewees (p.188). Therefore, the interview questions are:

1. What kind of methods and materials do you use in your practice? Why?
(Methodological aspect)
2. How do you teach the students with different needs and interests?
(Practical aspect)
3. What can you comment on foreign language education in Turkey in a past-present-future context?
(Contextual aspect)
4. What are your opinions regarding the policies of MoNE towards ELT?
(Political aspect)
5. In your opinion, what can be done in order to enhance the quality of foreign language education in Turkey?
(Developmental aspect)
6. Is there anything you want to mention other than these questions?

The conversations took place around these main topics. However, neither the questions nor the sequence of the questions was strictly followed. On some occasions, the order or the content of the questions changed in the flow of the conversations without deviating from the main theme. Another highlight of the interviews was that various prompts were used in order to further elaborate on the questions and unfold the interaction. For example, for the first question, *what kind of methods and material do you use in your practice?*, the prompting question, *do you think there is a best method for every student?* or for the second question, *how do you teach the students with different needs and interests?*, the prompting question, *how do you motivate the students with a low level of motivation*, were used. In addition, the terms ELT or foreign language in the questions were modified according to the participant's field of study.

3.6. DATA COLLECTION PROCEDURE AND DATA ANALYSIS

The data of the current research were collected in three phases. The first part of the data collection is carried out as an internet survey using the Multimodal Teaching Scale (Şahin, 2020), a questionnaire that was adapted from the Multimodal Literacy Scale by Bulut et al. (2015). After the adaptation period, the questionnaire was uploaded to Google Forms and the links were delivered via text messages or

Whatsapp to the participants who were selected on the basis of convenience sampling. A total number of 150 teachers of various fields of study that are working at different schooling levels in Bolu Province participated in the questionnaire. The data collection period lasted for approximately two weeks. After the data collection period, collected data were analyzed using SPSS 21 quantitative analysis tool.

In the analysis of the data, mainly the principles by Cohen et al. (2018) were followed. The preliminary investigation of the results revealed a homogeneous dataset throughout the questionnaire. However, responses from the 76th participant were removed from the overall data, since it was found out that the answers were given randomly (i.e. all of the items were rated 10) by the participant. As Iwaniec (2020) pointed out, “rushing when filling in a questionnaire might mean that the respondents skip some answers, which then needs to be taken into account when analyzing data” (p.326). Thus, the responses from a total of 149 participants were analyzed.

When the Multimodal Teaching Scale was examined, it was observed that only the 17th item in the original questionnaire (i.e. Multimodal Literacy Scale) remained unchanged. The rest of the items in the original questionnaire were either modified or discarded. Exploratory Factor Analysis (EFA) is a variable reduction technique which describes and identifies the number of latent constructs (factors) and the underlying factor structure of a set of variable (Suhr, 2006). Since almost all of the items in the Multimodal Teaching Scale were modified or rewritten, it was taken into consideration that the factors in the original scale might also differ. Therefore in order to examine the structural validity of the questionnaire, an EFA was carried out. The Kaiser Mayer Olkin (KMO)-Bartlett value was found 0.902 which proved that the data are suitable for factor analysis. As Cohen et al. (2018) stated, “the Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy should yield an overall measure of 0.6 or higher (maximum is 1)” (p.820).

The results from the Exploratory Factor Analysis (EFA) revealed 4 factors that explained 69.48% of the total variance. The percentage of the total variance explained is substantial since “in the social sciences, where information is often less precise, it is not uncommon to consider a solution that accounts for 60 % of the total variance as satisfactory and in some instances even less” (Hair et al., 2019, p. 142).

Factors with Eigenvalues that are greater than 1 were taken as valid factors since “those that are smaller than 1 generally are not of interest to researchers as they account for less than the variation explained by a single variable” (Cohen et al., 2018, p. 820). The scree-plot showing the results of the factor analysis is given below in Figure 1.

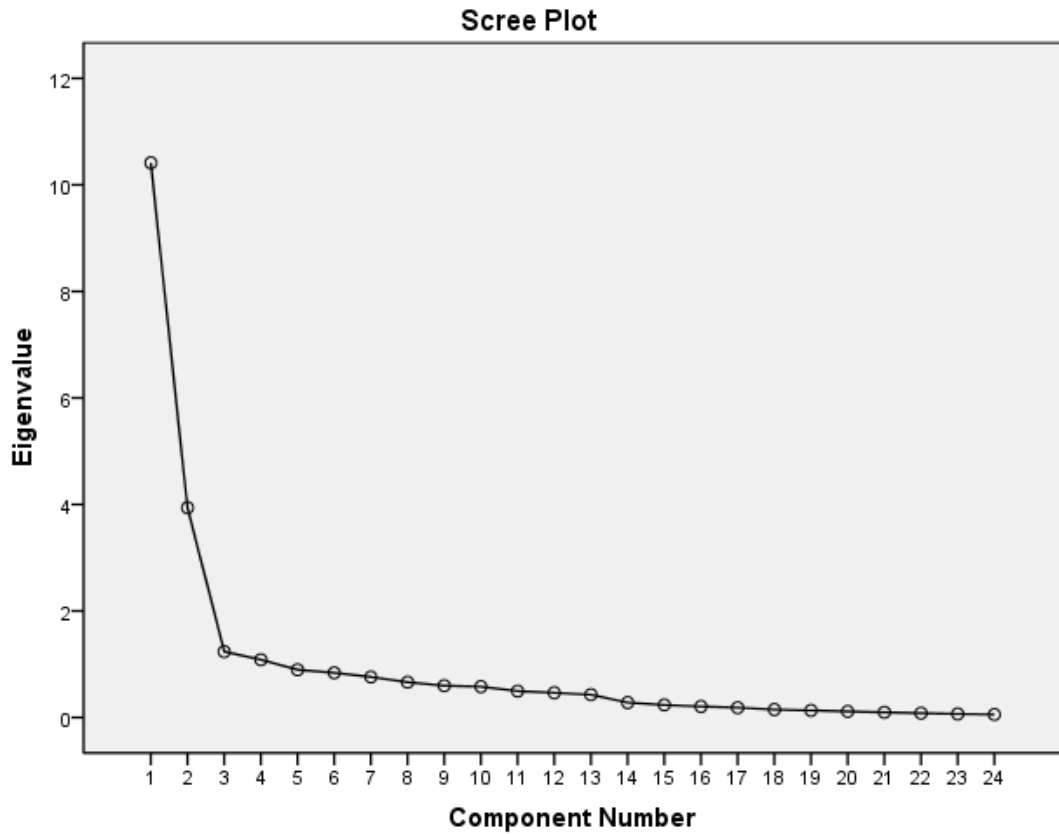


Figure 1. Results of the factor analysis

As mentioned above, 4 factors were obtained according to the results of the analysis. In order to determine the items in the factors, I benefited from the Rotated Component Matrix in Table 3. In the factor determination process, the *cut-off* point for the inclusion of the items was decided as 0.5. According to the cut-off point, items 1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15, 19, 20, and 22 were determined as the first factor, item 10, 11, 12, 13, 16, 17, 18, and 23 were determined as the second factor, item 21 was determined as the third factor, and finally, item 24 was determined as the fourth factor. In determining the factors, I benefited from the professional judgment about whether the variables “*hang together* – cluster – in a single factor, since it is important that the

variables chosen should not only have high values but also have values that are conceptually and numerically close to each other (homogeneous)” (Cohen et al., 2018, P.823). The data regarding the factors are presented in Table 3 below.

Table 3.

Rotated component matrix

	1	2	3	4
Item 14	0.931			
Item 5	0.906			
Item 19	0.905			
Item 4	0.904			
Item 20	0.880			
Item 3	0.872			
Item 7	0.865			
Item 2	0.862			
Item 6	0.822			
Item 8	0.819		0.331	
Item 1	0.804			
Item 22	0.769		0.393	
Item 9	0.634			-0.306
Item 15	0.607			
Item 12		0.811		
Item 11		0.808		
Item 23		0.799		
Item 13		0.736		
Item 16		0.656		
Item 17		0.638	-0.320	
Item 10		0.619	0.402	
Item 18		0.580	-0.370	
Item 21			0.689	
Item 24				0.843

As for the naming of the factors, the factors were named according to the general impressions of the items they contain. Since the items in the first factor are mainly concerned with the adoption and implementation of multimodality in personal practices, the first factor was named *adopting multimodality*. When the items in the second factor were examined, it was seen that they mainly focus on preferring monomodal structure over multimodality. Therefore, the second factor was named *avoiding multimodal structure*. The item in the third factor is about expressing oneself through multimodal structures. Hence, the factor was named *self-expression using*

multimodality. Finally, the fourth factor is concerned with the teachers' preferences of interpretation of the content. For that reason, the fourth factor was named *personal preferences regarding the interpretation of the content*. Finally, to determine whether there is a statistically significant relationship between the results of the two groups (i.e. English teachers and the teachers of other school subjects), Pearson's Chi-Squared test of independence was carried out.

The second part of the data collection is the video recordings of the lessons. 36 teachers (namely 20 English, and 16 other teachers) that were selected on a volunteer basis among the participants of the first part (i.e., the questionnaire) participated in this phase. A total of 40 hours of English lessons and 32 hours of lessons of other school subjects were recorded using Zoom. To enhance the reliability of the video recordings and reduce the probability of random errors, every teacher was recorded at two different times, teaching in two different classes. The data collection period lasted approximately one month. In order to observe and collect the data from the recordings, a checklist (i.e. Multimodal Classroom Observation Checklist) was developed based on the Multimodal Teaching Scale (Şahin, 2021), on the general teaching practices in the Turkish context, and finally on the literature on multimodality (See Appendix C for the checklist). The collected data were analyzed using SPSS 21.

Finally, interviews were conducted with the teachers. The participants of the interviews were also selected on a volunteer basis among the participants of the second part (i.e. video recordings). In order to conduct the interviews, a timetable was scheduled according to the availability of the participants. A total number of 12 teachers were interviewed in two weeks. The interviews were carried out online via Zoom and they lasted between 20-30 minutes on average. The data analysis phase of the interviews was implemented in three parts. Firstly, transcription of the interviews, secondly, since half of the participants (n=6) were speakers of Turkish, the translations of the transcriptions, and finally, the analysis of the transcriptions was carried out. The transcription and translation phases were done manually by the researcher, while the analysis phase was carried out using Nvivo qualitative analysis tool.

CHAPTER 4

4. FINDINGS

4.1. INTRODUCTION

This chapter presents the results of the current research in three parts. First, the results of the data analysis from the questionnaire were examined. In the second and third part, qualitative data analysis, namely the analysis of the data from the video recordings and the analysis of the data from the interviews, was carried out.

4.2 QUANTITATIVE DATA ANALYSIS

In this part of the research, the data from the questionnaire were analyzed. In order to investigate the teachers' preferences, beliefs, and attitudes regarding multimodality, a 24-item scale (i.e. Multimodal Teaching Scale) that was adapted from the Multimodal Literacy Scale by Bulut et al. (2015) was administered to a total number of 150 teachers, namely 46 English Language Teachers and 104 teachers of other school subjects. While the original scale consisted of 17 items and three factors, the adapted version consisted of 24 items and four factors. However, since the third and fourth factors consisted of only one item each, namely item 21 and item 24, these factors/items were not included in the evaluation process. As Hair et al. (2019) emphasized, "good practice dictates a minimum of three items per factor, preferably four, not only to provide minimum coverage of a construct's theoretical domain but also to provide adequate identification for the construct." Therefore, only the items in the first and the second factors were evaluated. The questionnaire was applied to the teachers as an internet survey, and the results were analyzed using SPSS 21.

4.2.1 Teachers' opinions and preferences on the use of multimodality

Since this research was intended as a comparative investigation between English language teachers and the teachers of other school subjects from a descriptive point of view, multimodality preferences and uses of these two groups were compared in the research. Furthermore, to avoid ambiguity, the terms "teachers of other school subjects" and "other teachers" or the terms "lessons of the teachers of other school subjects", "lessons of other teachers", or "other lessons" were used interchangeably in the thesis. In order to collect the teachers' opinions on their use and preferences of

multimodality in their practice, a 24-item scale, namely Multimodal Teaching Scale (Şahin, 2021) was administered as an internet survey. Descriptives regarding the questionnaire were given in Figures 2, 3, and 4.

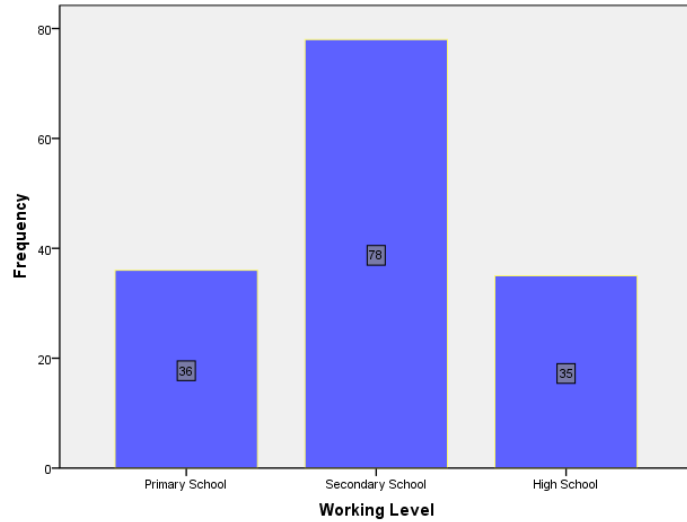


Figure 2. Descriptives about the teachers' working level

As mentioned above, the teachers working at different levels of the state schools in Bolu Province were investigated in this research. The questionnaire was administered to 36 primary school teachers, 78 secondary school teachers, and 35 high school teachers. In the following figure, descriptives about the teachers' experiences were presented.

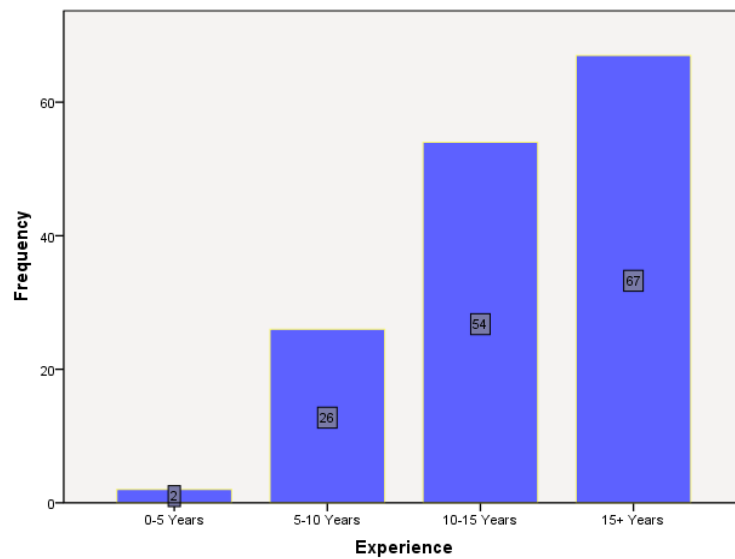


Figure 3. Descriptives about the years of experience

As seen in Figure 3, 2 teachers with 0-5 years of experience, 26 teachers with 5-10 years of experience, 54 teachers with 10-15 years of experience, and 67 teachers with more than 15 years of experience participated in the current research. It should be taken into consideration that since the experience of the teachers is not the subject of comparison in this thesis, the variations between the numbers of the teachers in terms of their experience are of no significance. In Figure 3, descriptives regarding the teachers' fields of study were presented.

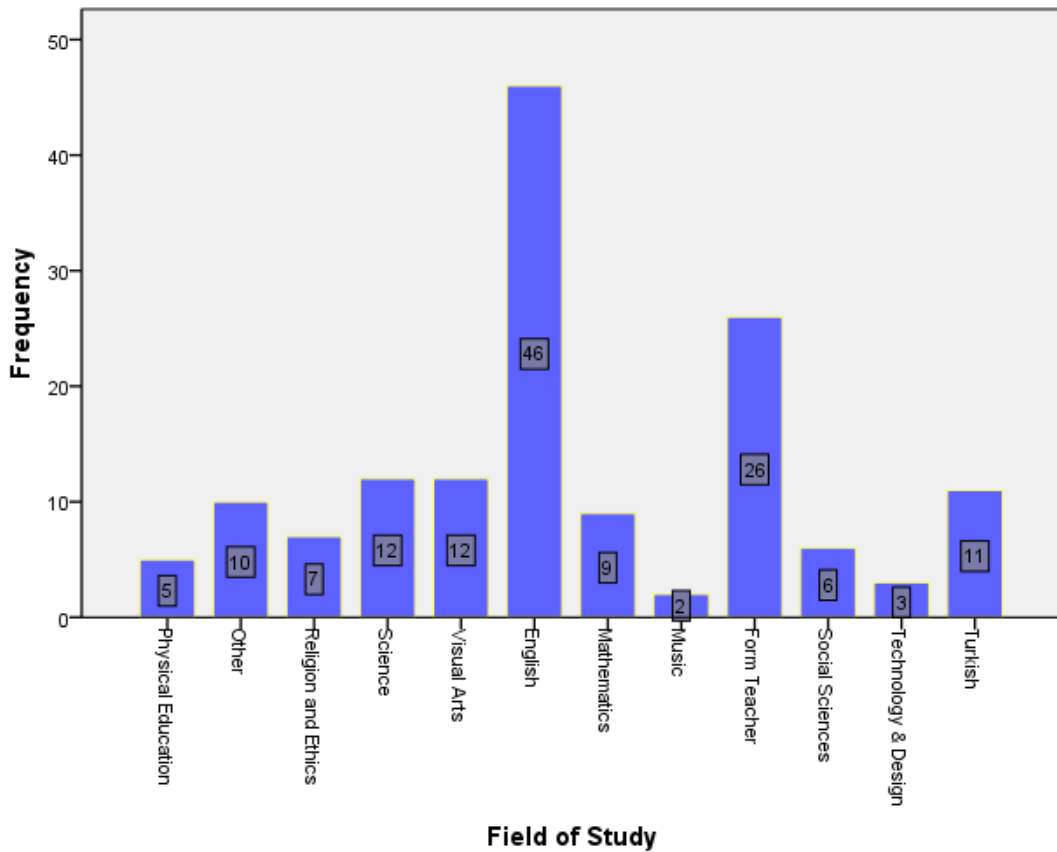


Figure 4. Descriptives about the teachers' fields of study

In the quantitative part of this research, a total number of 150 teachers participated. The participants consisted of 5 physical education teachers, 7 religion and ethics teachers, 12 science teachers, 12 visual arts teachers, 9 mathematics teachers, 2 music teachers, 6 social sciences teachers, 3 technology and design teachers, 11 Turkish teachers, 26 form teachers working at primary schools, 10 teachers of other school subjects and 46 English teachers. Since the main aim of this thesis is the comparison between English language teachers and the teachers of other school subjects, the results of the non-English teachers were unified and compared to the

results of English language teachers. To sum up, the results of 46 English language teachers were compared to the results of a total number of 104 teachers of other school subjects.

In order to examine the structural validity of the questionnaire, an Exploratory Factor Analysis (EFA) was carried out and the Kaiser Mayer Olkin (KMO)-Bartlett value was found 0.902 which proved that the data were suitable for factor analysis. The results of the EFA revealed four factors (See Table 3) which explained 69.48% of the total variance. However, since the third and fourth factors consisted of only one item per factor, these two items/factors are not included in the evaluation process. After the EFA, to analyze the data, the Pearson Chi-squared independence test was carried out. Pearson's Chi-squared test of independence (Pearson, 1900) is used "to state if two nominal (categorical) variables are independent or not, and we can determine if there is a statistically significant relationship between these two nominal variables using this test" (Benhamou & Melot, 2018). Table 4 presents the results of Pearson's Chi-squared test.

Table 4.

Chi-Square Tests Results

Item	Value	Df	Asymp. Sig (2-sided)
1	10.041	8	.262
2	12.389	7	.088
3	6.228	7	.513
4	8.644	7	.279
5	4.138	6	.658
6	22.789	7	.002
7	3.338	6	.765
8	4.477	5	.483
9	6.807	8	.558
10	20.474	9	.015
11	8.561	9	.479
12	9.599	9	.384
13	23.406	8	.003
14	7.163	7	.412
15	17.363	9	.043
16	4.357	9	.886
17	5.210	8	.735
18	4.589	7	.710
19	5.867	7	.555
20	7.200	7	.408
21	16.288	9	.061
22	10.460	8	.234
23	5.781	9	.762
24	8.669	9	.468

According to Larson-Hall (2012), “the usual cut-off point in the SLA literature for concluding that a result is statistical is for the p-value to be below $\alpha = .05$ ” (p. 247). Therefore, as seen in Table 4, there is a significant difference between English teachers and the teachers of other school subjects only in items 6, 10, 13, and 15, which means these items provided field-specific results. The rest of the items provided insignificant results regarding the fields of study. In the following section, the results of the items in the questionnaire were explored one by one. However, to avoid visual load, only the crosstabs of the first item, the items that yielded field-specific results, and three items in each factor with the highest factor loads were included in this section. The rest of the crosstabs can be seen in Appendix D.

4.2.2 Results of the questionnaire

Table 5.
Crosstabs for Item 1

Item 1		1. I prefer preparing interactive presentations using music, visuals, and/or animations in my lessons.								Total	
		1	2	4	5	6	7	8	9		10
English	Count	1	0	0	1	1	3	7	7	26	46
	% within Field of Study	2.2%	.0%	.0%	2.2%	2.2%	6.5%	15.2%	15.2%	56.5%	100.0%
	% of Total	.7%	.0%	.0%	.7%	.7%	2.0%	4.7%	4.7%	17.4%	30.9%
Other	Count	0	4	3	5	6	6	19	21	39	103
	% within Field of Study	.0%	3.9%	2.9%	4.9%	5.8%	5.8%	18.4%	20.4%	37.9%	100.0%
	% of Total	.0%	2.7%	2.0%	3.4%	4.0%	4.0%	12.8%	14.1%	26.2%	69.1%

In Table 5, statistical data regarding item 1 were presented. Data from a total number of 46 English teachers and 103 teachers of other school subjects were analyzed. The participants marked their responses on a scale of 10-points. 56% of the English teachers (n=26) which equals 17.4% of the total population marked the 10th point on the scale. As for the teachers of other school subjects, 37.9% of the other teachers (n=39) which equals 26.2% of the total population marked the 10th point on the scale.

The crosstabs regarding item 2 were presented in Table 6 (see Appendix D). 34.8% of the English teachers (n=16) which equals 10.7% of the total population marked the 10th and 9th point on the scale. On the other hand, 47.6% of the other teachers (n=49) which equals 32.9% of the total population, and 15.5% (n=16) of them

which equals 10.7% of the total population marked the 10th and 9th point on the scale respectively.

For item 3, more than 50% of both English teachers and other teachers marked the 10th point on the scale. As seen in Table 7, 52.2% of English teachers (n=24) which equals 16.1% of the total respondents, and 50.5% of the other teachers (n=52) which equals 34.9% of the total respondents, marked the 10th point. Finally, an approximation between the percentages of the English teachers and other teachers regarding the 2nd, 5th, and 8th points of the item can be seen in Table 7.

As for item 4, the number of English teachers who marked 10th point on the scale is 22 with a percentage of 47.8 among all English teachers and 14.8 among all the participants. 49.5% of other teachers (n=51), on the other hand, marked the 10th point on the scale. The percentage of the other teachers in the total population who marked the 10th point on the scale is 34.2.

The 10th point (i.e. totally suitable for me) on the crosstabs for item 5 received the highest scores so far in the questionnaire. 65.2% of the English teachers (n=30) and 62.1% of the other teachers (n=64) responded to the item *using various elements in presentations facilitate communication with totally suitable for me*. The percentage of English teachers in the total population is 20.1 and the percentage of other teachers in the total population is 43.0.

Table 10.

Crosstabs for Item 6

Item 6		6. I think using the content from different media channels (e.g. newspapers, television, social media) in the lessons can be beneficial.								Total
		2	4	5	6	7	8	9	10	
English	Count	1	0	2	1	0	1	18	23	46
	% within Field of Study	2.2%	.0%	4.3%	2.2%	.0%	2.2%	39.1%	50.0%	100.0%
	% of Total	.7%	.0%	1.3%	.7%	.0%	.7%	12.1%	15.4%	30.9%
Other	Count	3	4	1	0	4	16	14	61	103
	% within Field of Study	2.9%	3.9%	1.0%	.0%	3.9%	15.5%	13.6%	59.2%	100.0%
	% of Total	2.0%	2.7%	.7%	.0%	2.7%	10.7%	9.4%	40.9%	69.1%

As mentioned earlier, the chi-square value for item 6 is .002 which means that there is a significant difference between the responses of the English teachers and other

teachers for this item. When examined, the data from the table reveal that 59.2% of the other teachers (n=61) marked the 10th point (i.e. totally suitable) on the scale, followed by 13.6% of them (n=14) marking 9th point, and 15.5% of them (n=16) marking 8th point, which equals 88.3% of the total number of other teachers and 61% of the total population. On the other hand, the percentage of English teachers who marked the 10th point on the scale is 50% (n=23), followed by 39.1% of English teachers (n=18) marking 9th point and 2.2% of them (n=1) marking 8th point, which constitutes 91.3% of English teachers and 28.2 of the total population. Results of the chi-square test of this item show that English language teachers favor using the content from different media channels (e.g. newspapers, television, social media) in the lessons more than the teachers of other school subjects.

In Table 11, the results of item 7 were presented. The 10th point in the item was marked by the highest number of other teachers (n=65) in the whole questionnaire with a percentage of 63.1% which equals 43.6% of the total population. The number of English teachers who marked the 10th point on the scale is 31, which constitutes 67.4% of the English teachers and 20.8% of the total population.

Item 8 regarding the body language that is used during speaking received scores for the 2nd, 6th, 7th, 8th, 9th, and 10th points on the scale. 63% of the English language teachers (n=29) responded with totally suitable for me. On the other hand, 58.3% of the other teachers (n=60) marked the 10th point on the scale.

Table 13 presents the results for item 9. All of the points on the scale received responses from the participants. The points that received the highest scores from English teachers are 10th and 8th points with 17 and 12 English teachers respectively. For the teachers of other school subjects, similar results were received. 45.6% of the other teachers (n=47), and 18.4% of them (n=19) marked 10th and 8th points on the scale respectively.

Table 14.

Crosstabs for Item 10

Item 10		10. Communication in which text, sound, and visual elements are used together is boring.										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	24	3	8	1	2	0	0	4	1	3	46
	% within Field of Study	52.2%	6.5%	17.4%	2.2%	4.3%	.0%	.0%	8.7%	2.2%	6.5%	100.0%
	% of Total	16.1%	2.0%	5.4%	.7%	1.3%	.0%	.0%	2.7%	.7%	2.0%	30.9%
Other	Count	58	21	6	1	2	2	2	0	4	7	103
	% within Field of Study	56.3%	20.4%	5.8%	1.0%	1.9%	1.9%	1.9%	.0%	3.9%	6.8%	100.0%
	% of Total	38.9%	14.1%	4.0%	.7%	1.3%	1.3%	1.3%	.0%	2.7%	4.7%	69.1%

Item 10 in the questionnaire is the second item on the scale that received a chi-square value less than .05. As shown in Table 4, the chi-square value of item 10 is .015 which means that this item is field-specific and there is a significant difference between the responses of English language teachers and other teachers. The above crosstabs for item 10 show that 52.2% of the English teachers (n=24) marked the 1st point on the scale and 56.3% of the other teachers (n=58) marked the 1st point on the scale. According to the results from the crosstabs, other teachers think, more significantly than English teachers, that *communication in which text, sound, and visual elements are used together is not boring*.

Table 15.

Crosstabs for Item 11

Item 11		11. Electronic environments in which visual, audial, and written elements are used together are distracting.										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	23	5	8	2	1	0	2	2	0	3	46
	% within Field of Study	50.0%	10.9%	17.4%	4.3%	2.2%	.0%	4.3%	4.3%	.0%	6.5%	100.0%
	% of Total	15.4%	3.4%	5.4%	1.3%	.7%	.0%	1.3%	1.3%	.0%	2.0%	30.9%
Other	Count	49	24	12	4	2	3	1	2	2	4	103
	% within Field of Study	47.6%	23.3%	11.7%	3.9%	1.9%	2.9%	1.0%	1.9%	1.9%	3.9%	100.0%
	% of Total	32.9%	16.1%	8.1%	2.7%	1.3%	2.0%	.7%	1.3%	1.3%	2.7%	69.1%

The 11th item regarding the use of visual, audial, and written elements together in electronic environments received scores for all of the points on the scale. While 50%

of the English teachers (n=23) marked the 1st point, which is “not suitable for me”, 47.6% of other teachers (n=49) responded, “not suitable for me”. The responses from English teachers for the first point on the scale constituted 15.4% of the total population, while the number of other teachers who marked the 1st point constituted 32.9% of the total population.

Table 16.

Crosstabs for Item 12

Item 12		12.Using visual, auditory, and written elements together can lead to mental laziness.										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	14	9	9	4	5	1	2	0	1	1	46
	% within Field of Study	30.4%	19.6%	19.6%	8.7%	10.9%	2.2%	4.3%	.0%	2.2%	2.2%	100.0%
	% of Total	9.4%	6.0%	6.0%	2.7%	3.4%	.7%	1.3%	.0%	.7%	.7%	30.9%
Other	Count	35	28	12	9	6	5	0	2	2	4	103
	% within Field of Study	34.0%	27.2%	11.7%	8.7%	5.8%	4.9%	.0%	1.9%	1.9%	3.9%	100.0%
	% of Total	23.5%	18.8%	8.1%	6.0%	4.0%	3.4%	.0%	1.3%	1.3%	2.7%	69.1%

In Table 16, statistical data regarding item 12 were presented. 14 of 46 English teachers responded “totally agree” to the item, while 35 of 103 other teachers marked the 1st point on the scale. The percentage of the English teachers within their field of study is 30.4%, and 9.4% within the total participants. On the other hand, the percentage of other teachers within their field of study is 34%, and 23.5% within the total participants.

Table 17.

Crosstabs for Item 13

Item 13		13. I believe only in the power of verbal expression when sharing my opinions.									Total
		1	2	3	4	5	6	7	8	10	
English	Count	13	12	13	2	0	3	0	2	1	46
	% within Field of Study	28.3%	26.1%	28.3%	4.3%	.0%	6.5%	.0%	4.3%	2.2%	100.0%
	% of Total	8.7%	8.1%	8.7%	1.3%	.0%	2.0%	.0%	1.3%	.7%	30.9%
Other	Count	48	20	14	10	5	0	4	0	2	103
	% within Field of Study	46.6%	19.4%	13.6%	9.7%	4.9%	.0%	3.9%	.0%	1.9%	100.0%
	% of Total	32.2%	13.4%	9.4%	6.7%	3.4%	.0%	2.7%	.0%	1.3%	69.1%

Item 13 regarding the teachers' beliefs towards the power of verbal expression when sharing their opinions yielded one of the most diverse results in the questionnaire. 28.3%, 26.1%, and 28.3% of English teachers (n= 13, 12, and 13 respectively) marked the 1st, 2nd, and 3rd points on the scale respectively, which shows the level of the incongruence of the item for them. However, nearly half of the other teachers (n= 48) marked the 1st item on the scale, with a percentage of 46.6% within their field of study, and 32.2% within total participants. In addition, the chi-square value of item 13, as shown in Table 4, is .003 which means there is a significant difference between the results of the English teachers and the teachers of other school subjects. The crosstabs for item 13 shows that other teachers disfavor the power of verbal expression when sharing their opinions more than English teachers.

Table 18.

Crosstabs for Item 14

Item 14		14. In my lessons, I use visual elements in addition to verbal lectures.								Total
		2	3	4	6	7	8	9	10	
English	Count	0	1	0	0	1	4	9	31	46
	% within Field of Study	.0%	2.2%	.0%	.0%	2.2%	8.7%	19.6%	67.4%	100.0%
	% of Total	.0%	.7%	.0%	.0%	.7%	2.7%	6.0%	20.8%	30.9%
Other	Count	3	0	1	1	8	13	18	59	103
	% within Field of Study	2.9%	.0%	1.0%	1.0%	7.8%	12.6%	17.5%	57.3%	100.0%
	% of Total	2.0%	.0%	.7%	.7%	5.4%	8.7%	12.1%	39.6%	69.1%

Item 14 in the questionnaire is concerned with the use of visual elements in addition to verbal lectures. The percentage of English teachers (i.e. 67.4%) who marked the 10th point on the scale within the total number of English teachers is slightly higher than the percentage of other teachers (i.e. 57.3%) within their field of study. While 59 of 103 teachers of other school subjects marked 10th point, the number of English teachers marking that point is 31.

Table 19.

Crosstabs for Item 15

Item 15		15. I prefer using technological tools (e.g. Edmodo, Google Classroom, Kahoot) to help students understand the subject better.										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	1	0	1	1	0	4	4	9	4	22	46
	% within Field of Study	2.2%	.0%	2.2%	2.2%	.0%	8.7%	8.7%	19.6%	8.7%	47.8%	100.0%
	% of Total	.7%	.0%	.7%	.7%	.0%	2.7%	2.7%	6.0%	2.7%	14.8%	30.9%
Other	Count	2	6	5	1	16	2	8	15	14	34	103
	% within Field of Study	1.9%	5.8%	4.9%	1.0%	15.5%	1.9%	7.8%	14.6%	13.6%	33.0%	100.0%
	% of Total	1.3%	4.0%	3.4%	.7%	10.7%	1.3%	5.4%	10.1%	9.4%	22.8%	69.1%

Table 19 presents the percentages and the frequencies of participants for item 15 in the questionnaire. 47.8% of English teachers (n= 22) marked the 10th point in the item while 33% of other teachers (n=34) marked that point. The percentages of the teachers who marked the 10th item within total participants are 14.8% for English teachers and 22.8% for other teachers. Furthermore, item 15 is the last of the four items in the questionnaire that yielded significantly different results between English teachers and other teachers with a chi-square value of .043. As seen in Table 21, English teachers prefer using technological tools (e.g. Edmodo, Google Classroom, Kahoot) to help students understand the subject better more than other teachers.

Item 16 regarding the use of multiple modes in the lessons is a validity item for item 11. A great majority of the responses of the English teachers accumulated on the 1st, 2nd, and 3rd points, while the responses from the other teachers spread to all of the points in the item. 41.3%, 23.9%, and 21.7% of the English teachers (n= 19, 11, 10 respectively) marked the 1st, 2nd, and 3rd points on the scale. 37.9%, 23.3%, and 14.6% of the teachers of other school subjects (n= 39, 24, and 15 respectively), on the other hand, marked the 1st, 2nd, and 3rd points respectively.

In Table 21, results regarding item 17 are presented. 54.3% of the English teachers (n=25) responded “totally unsuitable for me” to the item while 61.2% of the other teachers (n= 63) marked the 1st point on the scale. The percentage of English teachers is 16.8%, and the percentage of other teachers is 42.3% within the total participants.

Item 18 regarding the direct instruction yielded similar results for both English teachers and other teachers. 56.5% of the English teachers (n=26) marked the 1st point (i.e. totally unsuitable for me) on the scale, while 61.2% of other teachers (n= 63) marked the 1st point. The percentage of English teachers is 17.5%, and the percentage of other teachers is 42.3% within the total population.

Table 23.

Crosstabs for Item 19

Item 19		19. I think that video-supported teaching can have a positive effect on learning.							Total	
		2	4	5	6	7	8	9		10
English	Count	1	0	0	0	1	1	11	32	46
	% within Field of Study	2.2%	.0%	.0%	.0%	2.2%	2.2%	23.9%	69.6%	100.0%
	% of Total	.7%	.0%	.0%	.0%	.7%	.7%	7.4%	21.5%	30.9%
Other	Count	3	1	4	2	5	7	21	60	103
	% within Field of Study	2.9%	1.0%	3.9%	1.9%	4.9%	6.8%	20.4%	58.3%	100.0%
	% of Total	2.0%	.7%	2.7%	1.3%	3.4%	4.7%	14.1%	40.3%	69.1%

Item 19 in the questionnaire is concerned with the positive effects of video-supported teaching on learning. Both English teachers and other teachers provided similar responses. 69.6% and 23.8% of English teachers (n= 32, and 11 respectively) marked the 10th and 9th points on the scale respectively. In addition, 58.3% and 20.4% of other teachers (n= 60 and 21 respectively) marked the 10th and 9th points respectively.

In Table 24, the results concerning item 20 were presented. The 10th point in this item received the highest percentage from the English teachers among all of the items in the questionnaire. 73.9 percent of English teachers (n= 34) marked the 10th point on the scale while 60.2% of other teachers (n=62) marked the 10th point.

Item 21 regarding the contexts where there is only one type of communication, is one of the two items in the questionnaire that was excluded from the evaluation according to the results of the EFA. Therefore the crosstabs of the item were not included in the results. However in order to present the results of the item, the crosstabs were examined and a disorganized distribution was observed throughout the item. All

of the points received varied scores from other teachers, while all of the points except the 6th received scores from English teachers (see Appendix E for the crosstabs).

Table 26 presents the results of item 22 concerning the opinions of the teachers towards body language. 54.3% of English teachers (n=25) marked the 10th point on the scale while 45.6% of other teachers (n= 47) marked the 10th. The percentage of English teachers who marked the 10th point within the total population is 16.8% while the percentage of other teachers is 31.5%.

Table 27.

Crosstabs for Item 23

Item 23		23. Contexts where multiple modes (written. oral. visual. auditory) are used are confusing.										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	21	13	6	3	1	2	0	0	0	0	46
	% within Field of Study	45.7%	28.3%	13.0%	6.5%	2.2%	4.3%	.0%	.0%	.0%	.0%	100.0%
	% of Total	14.1%	8.7%	4.0%	2.0%	.7%	1.3%	.0%	.0%	.0%	.0%	30.9%
Other	Count	43	23	14	6	3	3	3	1	6	1	103
	% within Field of Study	41.7%	22.3%	13.6%	5.8%	2.9%	2.9%	2.9%	1.0%	5.8%	1.0%	100.0%
	% of Total	28.9%	15.4%	9.4%	4.0%	2.0%	2.0%	2.0%	.7%	4.0%	.7%	69.1%

Item 23 regarding the contexts where multiple modes are used was examined in Table 27. 45.7%, 28.3, and 13% of the English teachers (n=21, 13, and 6) marked the 1st, 2nd, and 3rd points on the scale respectively. On the other hand, 41.7%, 22.3%, and 13.6% of the teachers of other school subjects (n= 43, 23, and 14) marked the 1st, 2nd, and 3rd points respectively.

Finally, the last item in the questionnaire is the second item which was excluded from evaluation according to the results of EFA. However, in order to present the results, crosstabs of the item were examined, and a disorganized distribution of the responses of the teachers was observed. Both English teachers and other teachers provided varied responses throughout the item. All of the points in the item received responses from at least one teacher (see Appendix E for the crosstabs).

4.3 QUALITATIVE DATA ANALYSIS

In this chapter of the thesis, the analysis of the data from the qualitative investigation is presented. The qualitative research was undertaken in two parts. The first part is the video recordings of the lessons and the second part is the interviews. In the first part, video recordings of the lessons of 20 English teachers were collected. In order to enhance the reliability of the data, each teacher was recorded in two different lessons at two different times with two different classes. In this way, a total of 40 hours of English lessons were recorded. To compare the differences in the modality preferences between English Language teachers and the teachers of other school subjects such as Mathematics (n=2), Science (n=5), Turkish (n=4), Religion and Ethics (n=2) and Social Studies (n=3), the video recordings of 16 teachers of these subjects were also collected in the same fashion with English Language Teachers (see Table 2 for the descriptives of the video recordings).

In order to observe and evaluate the recordings of the lessons, the Multimodal Classroom Observation Checklist (Şahin, 2021) that was developed based on the Multimodal Teaching Scale (Şahin, 2021), on the general teaching practices in the Turkish context, and finally on the literature on multimodality discussed in the current paper so far was used. The checklist examines the lessons in terms of six different aspects (i.e. modes/designs), namely linguistic design, textual design, visual design, audial design, technological design, and gestural/bodily/kinesthetic design. These modes were then divided into three sub-items each. Finally, at the bottom of the checklist an empty space was allocated for the comments of the researcher (See Appendix C for the Multimodal Classroom Observation Checklist).

4.3.1 Teachers' actual practices regarding multimodality

As mentioned above, the lessons of various teachers were evaluated using the Multimodal Classroom Observation Checklist (Şahin, 2021). In order to examine the lessons thoroughly, the observations were done asynchronously, that is, the lessons were first recorded and the observations were carried out on these recordings later. The lessons were recorded using Zoom. Teachers and their students were informed before the lessons and they give their consent for the recording of the lesson.

The Multimodal Classroom Observation Checklist consisted of six main modes/designs (i.e. verbal, textual, visual, technological, audial, and bodily/kinesthetic/gestural designs), under which three sub-items exist. Also, as the Multimodal Teaching Scale (Şahin, 2021), the items in the Checklist have 10 points that define the frequency of the item (i.e. 1=never, 10=always). In Figure 5, descriptives about the video recordings were presented. A total of 40 hours of English lessons were recorded in addition to a total of 32 hours of the other lessons, namely 4 hours of Religion lesson, 10 hours of Science lesson, 8 hours of Turkish lesson, 4 hours of Mathematics lesson, 6 hours of Social Sciences lesson.

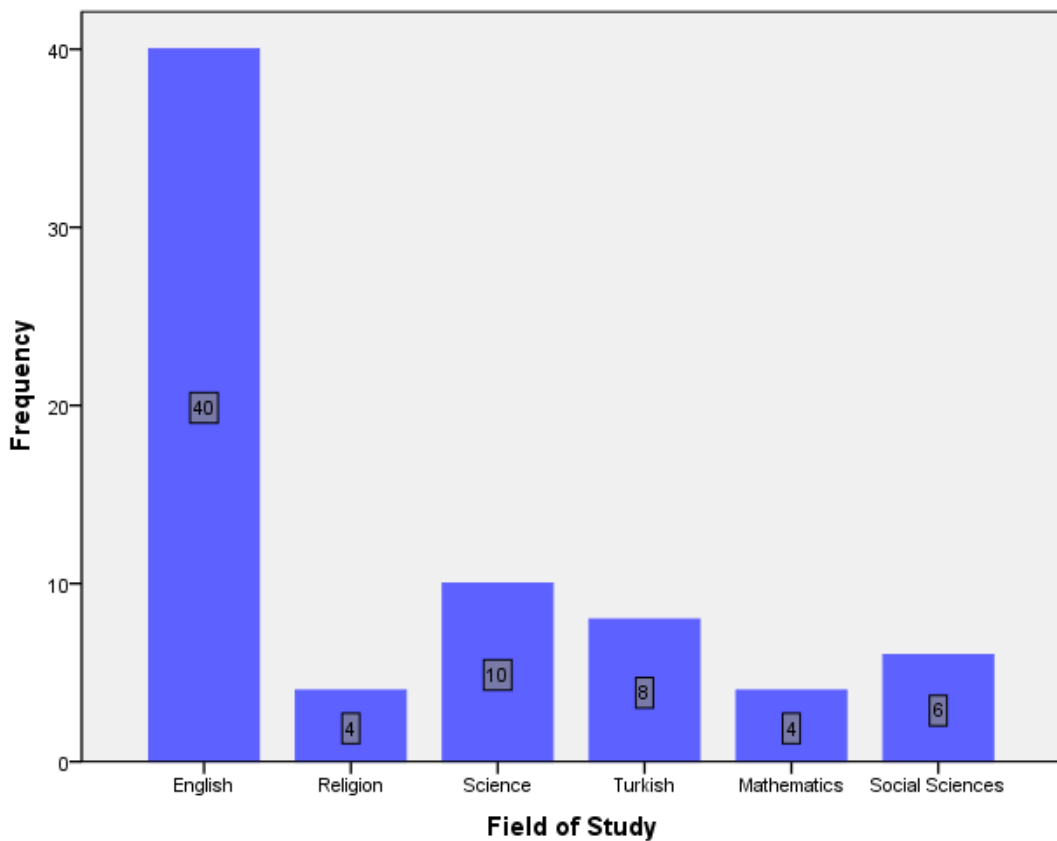


Figure 5. Descriptives about the video recordings

In Table 29 below, the percentages of the teachers that participated in this part were presented. The English teachers formed 55.6% of the total participants while the teachers of other school subjects formed 44.4% of the total participants. As mentioned above, since the current research is a comparative investigation between English

teachers and the teachers of other school subjects, the results of other teachers were unified as one score and compared with the results of English teachers, rather than comparing the results based on each field of study individually.

Table 29.

Descriptives about the teachers' field of study for the video recordings

	n	Percent	Valid	Cumulative
English	20	55.6	55.6	55.6
Religion	2	5.6	5.6	61.1
Science	5	13.9	13.9	75.0
Turkish	4	11.1	11.1	86.1
Mathematics	2	5.6	5.6	91.7
Social Sciences	3	8.3	8.3	100.0

The video recordings of the lessons were observed one by one by the researcher and the relevant points were marked in the checklist on a scale of 1-10. After this procedure, the collected data were analyzed using SPSS 21 in the same fashion as the questionnaire. The chi-square test results of the video recordings show that there are three items in the checklist that yielded field-specific results. These items were examined in the following section in detail.

Table 30.

Chi-Square Tests Results of the Video Recordings

Item	Value	Df	Asymp. Sig (2-sided)
1	13.803	8	.087
2	19.367	8	.013
3	2.571	2	.276
4	16.341	9	.060
5	8.015	7	.331
6	4.103	3	.251
7	5.513	5	.357
8	11.839	8	.159
9	.811	1	.368
10	19.907	9	.018
11	8.229	6	.222
12	14.034	8	.081
13	11.115	7	.134
14	18.289	7	.011
15	1.268	1	.260
16	10.194	6	.117
17	8.280	7	.309
18	5.530	7	.596

Table 30 presents the results of the chi-square test for the observations. Items 2, 10, and 14 received p-values below .05 which means that the difference between English teachers and other teachers is statistically significant in these items. Some of the items such as *other auditory resources* received relatively low values since there were almost no lessons that were relevant for that item. As mentioned above, the checklist consisted of six main modes/designs. These modes were then divided into three items. The first two items in each category explore one aspect of that mode. The third item, on the other hand, was allocated for other resources that were not specified in the first two items. The first three items in the following lines examine the lessons in terms of their *linguistic design*. However, to avoid visual load, only the crosstabs for the items that yielded field-specific results (i.e. 2nd, 10th, and 14th items) were presented in this section. The rest of the crosstabs can be seen in Appendix F.

In Table 31, the crosstabs for using voice and intonation in the lessons were examined. The results showed that a majority of both English and other teachers yielded poor results in terms of using their voice and intonation in their lessons. As seen in the table, in 4 English lessons and 5 other lessons, voice and intonation received 1 point which means *never used*. 35% of the English lessons (n=14) received 2 while 27,5% of them (n=11) received 3 for this item. At the same time, 6,3% of the other lessons (n=2) received 2 while 50% of them (n=16) received 3.

Table 32.

Crosstabs for Item 2

Item 2		2.Used verbal lectures								Total	
		1	3	4	5	6	7	8	9		10
English	Count	2	1	2	6	8	11	7	1	2	40
	% within Field	5.0%	2.5%	5.0%	15.0%	20.0%	27.5%	17.5%	2.5%	5.0%	100.0%
	% of Total	2.8%	1.4%	2.8%	8.3%	11.1%	15.3%	9.7%	1.4%	2.8%	55.6%
Other	Count	0	0	0	2	2	5	17	5	1	32
	% within Field	.0%	.0%	.0%	6.3%	6.3%	15.6%	53.1%	15.6%	3.1%	100.0%
	% of Total	.0%	.0%	.0%	2.8%	2.8%	6.9%	23.6%	6.9%	1.4%	44.4%

For the item examining the use of verbal lectures, results are above average for both groups. More than 50% of the English lessons received scores above the 6th point while more than 70% of the other lessons received 7th, 8th, 9th, and 10th points. In 5% of English lessons (n=2), verbal lectures were *always used*, while in 5% of them verbal

lectures were *never used*. At the same time in 3.1% of other lessons (n=1), verbal lectures were *always used*. In addition, as mentioned above, the chi-square value of this item is .013 which means that there is a significant difference between the two groups. The crosstabs show that other teachers used verbal lectures significantly more than English teachers.

Item 3 regarding the use of other verbal resources is one of the lowest ranking results in the checklist. None of the English teachers used a verbal resource other than the first two items in the checklist while on only two occasions, other verbal resources were used in the lessons of other teachers. To clarify, both cases were Turkish lessons in which teachers had students read poems. In one of these Turkish lessons, students read poems in the flow of the lesson, therefore it was rated 4, while in the other Turkish lesson, almost all of the lesson was carried out through poem reciting (see Appendix F for the crosstabs). The next three items investigate the lessons in terms of their *visual design*.

In Table 34, the crosstabs for item 4 were presented. The results showed that more than 50% of English lessons yielded results that are below average. On the other hand, the results of other lessons are equal for both halves of the scale with a percentage of 50% for the first 5 points, and a percentage of 50% for the other half. However, the number of other lessons in which the diagrams, tables, or pictures were never used (n=9) is more than the number of English lessons in which these modes were never used (n=5), with a percentage of 28.1% as compared to the English lessons which have a percentage of 12.5%.

In Table 35, the item regarding the use of animations or video recordings in the lessons was examined. 5% (n=2), 5% (n=2), 10%, 2.5%(n=1), and 5%(n=2) of English lessons received scores of 3, 4, 5, 7, and 8 respectively. In 72.5% of English lessons (n=29), animations or video recordings were never used. On the other hand, in 75.% of other lessons (n=24), these modes were never used. At the same time, 3.1% (n=1), 6.3% (n=2), 3.1% (n=1), and 12.5% (n=4) of other lessons received scores of 2, 5, 6, and 8 respectively.

Finally, for item 6 examining the use of other visual resources in the lessons, frequencies were relatively low such as item 3. In only two lessons, the English

teachers used visual resources other than the modes presented in item 4 and item 5. In two of other lessons, other visual resources were also used. While the use of other visual resources was marked 3 for English lessons, it was marked 8 and 9 for other lessons. To clarify, in English lessons, the teachers brought some real-life materials and showed them to the students at some point in the lessons. For the other lessons, both occasions were science lessons and the teachers carried out an experiment throughout the lessons synchronously with students using the materials that were available at their houses (see Appendix F for the crosstabs). The next three items examine the lessons in terms of their *audial design*.

In Table 37, the crosstabs for item 7 were presented. In 72.5% of English lessons (n=29), music was never used along with the lecture, while in 90.6% of other lessons (ne=29), music was not used. The English lessons that received 1 point on the scale forms 40.3% of the total number of lessons. Other lessons that received 1 point also form 40.3% of the total number of lessons.

Item 8 regarding the use of audio recordings in the lessons yielded various results in terms of English lessons and other lessons. The crosstabs show that audio recordings were used in only 3 out of 32 other lessons while in 15 out of 40 English lessons audio recordings were used. 17.5% of English lessons (n=7) yielded results above average for this item. On the other hand, only 1 other lesson received above-average points.

Finally, 9th item concerning the use of auditory resources other than the resources in 7th and 9th is one of the two lowest-ranking items in the checklist. In only one English lesson, other auditory resources were used. To specify, in the lesson, the teacher used repetition drills for vocabulary together with students. Item 10, 11, and 12 in the following lines are concerned with the *technological design* of the lessons. Since all of the teachers used Zoom for delivering their lessons, Zoom was not included in the evaluation as a technological tool. However, the instruments of the application (e.g. screen sharing or annotation tools) were considered as resources.

Table 40.

Crosstabs for Item 10

	Item 10	10.Used websites, internet										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	18	3	2	4	7	4	0	0	1	1	40
	% within Field	45,0%	7,5%	5,0%	10,0%	17,5%	10,0%	,0%	,0%	2,5%	2,5%	100,0%
	% of Total	25,0%	4,2%	2,8%	5,6%	9,7%	5,6%	,0%	,0%	1,4%	1,4%	55,6%
Other	Count	20	0	0	0	2	2	4	3	1	0	32
	% within Field	62,5%	,0%	,0%	,0%	6,3%	6,3%	12,5%	9,4%	3,1%	,0%	100,0%
	% of Total	27,8%	,0%	,0%	,0%	2,8%	2,8%	5,6%	4,2%	1,4%	,0%	44,4%

In Table 40, item 10 regarding the use of websites and/or the internet was examined. As shown in Table 30, the chi-square result for this item is .018 which means that there is a significant difference between the English lessons and other lessons for this item. The crosstabs show that in 55% of English lessons (n=22), websites and/or the internet were used to some degree. However, the number of other lessons in which these means were used was 12 with a percentage of 37.5%.

Item 11 regarding the use of technological tools (i.e. apps), received results from only English lessons. Technological tools were never used in other lessons. The resources that the English teachers used were interactive applications for doing activities such as playing games, solving puzzles, or doing vocabulary exercises.

The next item examines the lessons in terms of using technological tools other than the resources mentioned in item 10 and item 11. The crosstabs for item 12 show that in both English lessons and other lessons, other technological tools were commonly used. In more than half of the English lessons (n=22), other technological resources were used while in 69.7% of other lessons (n=22), these resources were used. Using the interactive version of the book, web-based quizzes, digital worksheets were all components of this item (see Appendix F for the crosstabs). The following three items examine the lessons in terms of *bodily/kinesthetic and/or gestural design*.

In Table 43, the use of body language in the lessons was examined. 7.5% and 7.5% English lessons (n= 3, n=3) received 8 and 9 points respectively. On the other hand, 6.3% of other lessons (n=2) received 9 points.

Table 44.

Crosstabs for Item 14

Item 14		14.Used gestures and/or facial expression								Total
		1	2	3	4	5	6	7	8	
English	Count	23	6	2	2	1	0	3	3	40
	% within Field	57.5%	15.0%	5.0%	5.0%	2.5%	.0%	7.5%	7.5%	100.0%
	% of Total	31.9%	8.3%	2.8%	2.8%	1.4%	.0%	4.2%	4.2%	55.6%
Other	Count	19	0	5	5	0	3	0	0	32
	% within Field	59.4%	.0%	15.6%	15.6%	.0%	9.4%	.0%	.0%	100.0%
	% of Total	26.4%	.0%	6.9%	6.9%	.0%	4.2%	.0%	.0%	44.4%

Item 14 regarding the use of gestures and facial expressions was investigated in Table 44. The chi-square result of this item is .011 which means that there is a significant difference between English lessons and other lessons. In 42.5% of English lessons (n=17), gestures and/or facial expressions were used by the teacher, while in 40.6% of other lessons (n=13), these resources were used.

Item 15 is the second of the two lowest-ranking items in the checklist. In only one lesson, bodily resources other than the resources mentioned in item 13 and item 14 were used. To clarify, in one of the science lessons, students carried out an experiment using bodily resources together with the teacher (see Appendix F for the crosstabs). The following three items are concerned with the *textual design* of the lessons. The use of written texts, coursebooks, and other print materials was examined in this section.

In Table 46, crosstabs results for item 16 were presented. In this item of the checklist, written texts that the teacher distributed to the students or using dictation in the lessons were evaluated. Digital texts that were used in the lessons were evaluated under the technological design section. In 47.5% of English lessons (n=19), written/print texts were used, while in 21.9% of other lessons (n=17) these resources were used.

Item 17 examines the lessons in terms of coursebook use. In less than half of both English lessons and other lessons, the printed version of the coursebooks was used. Using digital or interactive versions of the coursebooks was examined under technological design.

Finally, according to the results of item 18 concerning the use of print/written resources other than the written texts or coursebooks, in only 9.4% of other lessons (n=3), other printed/written resources were used, while in 25% of English lessons (n=10) these resources were used. To clarify, in two Mathematics lessons, the teacher wrote down a question on her whiteboard and students answered the questions on their own whiteboards and showed them to the teacher on camera. Also, the review quizzes that the students did on printed material were evaluated under this section (see Appendix F for the crosstabs).

4.3.2 Interviews

To gain a deeper understanding of the beliefs, attitudes, and preferences of the teachers regarding multimodality, interviews were conducted with 16 teachers of various school subjects on the basis of volunteering. These 16 teachers, namely primary school English teachers (n=2), secondary school English teachers (n=2), high school English teachers (n=2), science (n=2), mathematics (n=2), Turkish (n=2), religion and ethics (n=2), and social sciences (n=2) teachers, were selected among the participants of the video recordings (See Table 2 for the descriptives). Five main questions covering five main themes were prepared around which interviews were carried out. However, during the interviews, in order to establish cooperation, rapport, and relationship with the interviewee, the conversations were maintained in a more informal manner rather than strictly following the previously prepared criteria. As Cohen et al. (2018) commented, “the interviewer is responsible for establishing and maintaining a good rapport with the interviewee. This can be done by being clear, polite, non-threatening, friendly and personable, to the point without being too assertive” (p. 518). In the preparation phase of the interview questions, mainly the principles by Friedman (2012) were followed, which are minimizing the use of closed-ended (i.e., yes/no) questions, avoiding leading questions, avoiding complex questions that ask about several things at once, considering whether the questions will be comprehensible to interviewees (p.188).

Before conducting the interviews, a schedule was prepared according to the availability of the interviewees. The process lasted for about a week and the interviews were also carried out and recorded via Zoom. After the process, the conversations were transcribed and coded using Nvivo Qualitative Analysis Tool. Throughout this section,

pseudonyms were used. In the following table, the coding of the teachers was presented.

Table 49.

Coding of the Teachers

Teachers	Codes	References
English(High School)-Belgin	9	11
English(High School)-Sema	10	14
English(Primary School)-İzzet	12	13
English(Primary School)-Meral	11	18
English(Secondary School)-Fatma	10	11
English(Secondary School)-Gülşen	10	15
Mathematics-Aydan	8	10
Mathematics-Hülya	9	11
Religion and Ethics-Hale	8	10
Religion and Ethics-Türkan	9	14
Science-Ekrem	7	9
Science-Semra	6	9
Social Sciences-Ediz	7	13
Social Sciences-Halit	8	11
Turkish-Filiz	9	12
Turkish-Kemal	12	17

The first column in Table 49 was allocated to the names of the teachers. The second column presents the number of codes that the corresponding teacher referred to. Finally, in the third column, the number of references that the teacher made for the codes is shown. For example, Turkish teacher Kemal mentioned 12 codes on 17 occasions (i.e. references). 6 English teachers and 10 teachers of other fields of study participated in the interviews. However, since this is a comparative investigation between English and other teachers, the interview results of other teachers were unified and evaluated as one score. In the following table coding of the codes was discussed.

Table 50.

Coding of the Codes

Codes	Teachers	References
Excessive theoretical instruction	4	4
Good applications of the Ministry	3	4
Insufficient materials	11	13
Insufficient physical conditions	6	8
Lack of teacher qualities	5	7
Misapplications of the Ministry	12	26
Need for L2 exposure	4	5
Use of auditory mode	6	9
Use of bodily mode	14	20
Use of technological mode	11	14
Use of textual mode	11	14
Use of verbal mode	13	17
Use of visual mode	14	26

According to the interviews, 13 codes were created. The first column in the table above shows the names of the codes. The second column presents the number of teachers who mentioned that code and the last column shows the number of times that the corresponding code was referred to. For example, 14 teachers referred to the code *use of technological mode* on 20 occasions.

Table 51.

Cluster analysis of the wording

Group A	Group B	Pearson correlation coefficient
English Teachers	Other Teachers	.615442

In Table 51, cluster analysis of the wording of the teachers was examined. According to Boslaugh (2013), “Pearson’s r has a range of $(-1, 1)$, with 0 indicating no relationship between the variables, and the larger absolute values indicating a stronger relationship between the variables”. The Pearson correlation coefficient of the transcriptions of English and other teachers was .61. Therefore there is a positive relationship between the two groups in terms of their word choices.

Table 52.

Crosstabs of the codes

Codes	Eng. Belgin	Eng. Sema	Eng. İzzet	Eng. Meral	Eng. Fatma	Eng. Gülşen	Math. Aydan	Math. Hülya	Rlgn. Hale	Rlgn. Türkan	Sci. Ekrem	Sci. Semra	Soc. Ediz	Soc. Halit	Tr. Filiz	Tr. Kemal	Total	Percentage
1 : Excessive theoretical instruction	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	4	2.40%
2 : Good applications of the Ministry	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	4	2.40%
3 : Insufficient materials	1	1	1	1	0	0	1	2	0	2	0	0	1	1	1	1	13	7.78%
4 : Insufficient physical conditions	0	0	1	3	0	1	0	1	1	0	0	0	0	0	0	1	8	4.79%
5 : Lack of teacher qualities	1	2	0	2	0	0	0	1	0	0	0	0	0	0	0	1	7	4.19%
6 : Misapplications of the Ministry	0	1	0	4	1	3	2	2	2	0	1	2	3	2	0	3	26	15.57%
7 : Need for L2 exposure	2	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	5	2.99%
8 : Use of auditory mode	0	1	2	1	2	2	0	0	0	0	0	0	0	0	0	1	9	5.39%
9 : Use of bodily mode	2	2	1	1	0	1	1	1	0	1	1	2	1	1	2	3	20	11.98%
10 : Use of technological mode	0	2	1	0	1	1	1	0	1	2	0	0	1	2	1	1	14	8.38%
11 : Use of textual mode	1	0	1	1	1	3	1	1	1	1	0	0	0	0	1	2	14	8.38%
12 : Use of verbal mode	1	1	1	1	1	0	0	1	0	1	2	1	3	2	1	1	17	10.18%
13 : Use of visual mode	0	2	1	2	1	1	2	0	2	3	2	2	3	1	3	1	26	15.57%
Total	9	12	11	16	9	13	8	9	8	12	7	7	12	9	10	15	167	100.00%

Table 52 is concerned with the frequencies of the codes referred by the participants. For example, English teacher Belgin, İzzet and Fatma, and Science teacher Ekrem mentioned *excessive theoretical instruction* once. *Misapplications of the Ministry*, *use of visual mode*, and *use of bodily mode* are the most mentioned codes in the interviews with frequencies of 26, 26, and 20 respectively.

The most referred mode by the teachers in the interviews is the visual mode (n=26) with a percentage of 15.57% which is followed by bodily/kinesthetic mode (n=20) with a percentage of 11.98%, verbal mode (n=17) with a percentage of 10.18%, textual and technological modes (n=14) both with percentages of 8.38%, and finally the auditory mode (n=9) with a percentage of 5.39%. In the interviews, the participants were asked to compare their practices in face-to-face education and distance education. Most of the teachers reported that the distance education process completely changed their way of teaching. For example, Gülşen (Field of Study: English, Codes: 10, References: 15) stated:

Distance education has taught us a new way of teaching. We learned just like students did. I used to teach only with coursebooks, or physical materials, but now I learned how to teach with technology, videos, web 2.0 tools, and etc. I plan to use these methods in my face-to-face lessons, too, and not to return to my old ways.

In order to enrich the content of the interviews, and investigate the issues from multiple points of views, teachers were also asked about their opinions on the policies of the Ministry of National Education, suggestions for enhancing the quality of the education, and their practices regarding the students with different needs. Many of the teachers stated their discontent about the applications of the MoNE. They expressed that the reason behind their being limited in using various modes, and therefore the students' failure in learning the content was these misapplications. One of these misapplications is *excessive theoretical instruction*. Belgin (Field of Study: English, Codes: 9, References: 11) aptly explained this with an analogy:

We teach students a hundred ways of riding a bike. They know exactly every step of riding it. When we ask them, they can say the steps one by one without any mistakes. However, we never give them a bike and let them ride it. So, when they see a real bike in their real lives, they stumble and don't know what to do.

Other issues that the teachers' stated negative opinions about were the limited physical conditions, insufficient materials, lack of teacher qualities, and insufficient

weekly class hours. They stated that even if they want to use different modes, methods, or techniques, these limitations did not allow them to do so. Ediz (Field of Study: Social Sciences, Codes: 7, References: 13) expressed his opinions about the curriculum and weekly class hours in the following lines:

The curriculum that the MoNE expects us to finish before the end of the term is too intensive. When we deviate from the curriculum even a bit, we fall behind the schedule and put even more effort into trying to catch up with the curriculum. Also, the coursebooks are so filled with unnecessary information that these weekly class hours make it almost impossible to finish before the due date. Therefore, we cannot teach as we like.

In the following section, interview questions were examined in detail.

4.3.2.1 Interview questions

As mentioned above, there are five main questions covering five main aspects of teaching, namely the methodological aspect, practical aspect, contextual aspect, political aspect, and developmental aspect. However, since the interviews were designed as a semi-structured construct, on some particular occasions, the order or the content of the questions changed without deviating from the main theme. During the conversations, in order to further elaborate on the statements of the teachers and unfold the interaction, prompting questions such as, *what kind of methods and material do you use in your practice?* for the first question, or *do you think there is a best method for every student?* for the second question were used. Finally, the wording of some questions was changed according to the field of study of the interviewee. For example, for the third question *what do you think about foreign language education in Turkey?*, the term *foreign language education* was modified to *social sciences education* for social sciences teacher or *Turkish education* for Turkish teacher.

Interview question 1: What kind of methods and materials do you use in your practice? Please make a comparison between your face-to-face education and distance education practices.

The first question in the interview is concerned with the methodological aspect of education. Most of the teachers reported that in face-to-face education the lessons were more student-centered while they became more teacher-centered in distance

learning, limiting the teachers' use of different modes in their instruction. Instead of using the techniques in which the bodily/kinesthetic modes were required, teachers started to use more technology-based methods (i.e. interactive games, videos, or other visuals) in which the physical presence of the students was not essential. However, while having some disadvantages, teachers also commented that distance education was beneficial in some aspects. Sema (Field of Study: English, Codes: 10, References: 14) for example, stated:

In face-to-face education, we used to try to use as many techniques as possible. I could do more student-centered activities like drama, roleplay, etc. In distance education, however, it is more teacher-centered, based on q&a activities. But while limiting us, distance education provided us with rich opportunities at the same time. For example, it provided us with a lot of resources and materials like various platforms and web 2.0 tools. It was beneficial for both my personal development and for the development of my students. In the beginning, I was teaching through PowerPoint slides, but as the time passed, I started to use more interactive resources and web 2.0 tools.

Interview question 2: How do you teach the students with different needs and interests?

The second interview question is related to the practical aspect of teaching. Teachers were asked about their methods and techniques in meeting the needs and interests of their students. Same as the previous question, in this question, they were asked to answer it by making a comparison between face-to-face and distance learning. While some of the teachers stated that they tried to diversify their materials and techniques as much as possible, some other teachers expressed that they were unable to differentiate their instruction because of the aforementioned limitations. Filiz (Field of study: Turkish, Codes: 9, References: 12), in this respect, commented:

If the students like the teacher, they also like the lesson. So, I try to discover the students' interests. For example, if they play an online game, I find the game and play it. I learn and use the terms that were used in that game when I teach. So, I establish a connection with my students. I try to teach according to their learning styles. For kinesthetic learners, I use the activities in which they

can use their bodies. For the students who like computer games, I use online interactive applications which teach the subject through games.

On the other hand, some teachers expressed that because of the temporal limitations of the curriculum, the limitations of distance education, or the physical conditions, they cannot use different materials or techniques in their lessons. They stated that although they tried to include every student in the lesson, they were unable to do it because the number of students in their classes was too many and their time was limited. For example, İzzet (Field of Study: English, Codes: 12, References: 13) commented:

Every student has their own learning styles But unfortunately I don't have a chance to attend to every student one by one. So, I accept the fact that as if no one understands the topic and I start from the simplest level and I try to include every other student by using every kind of materials.

At this point of the interview, a prompting question (i.e. What about the low-level students? Can they keep up with others?) was asked, and he stated:

I don't have a problem in keeping up with the curriculum but since it is not possible to check how many of the students understand the subject, and how many don't one by one, I have to move on.

Interview question 3: What do you think about foreign language education in Turkey? Can you please answer this question by referring to the situation in the past, present, and the future?

Question 3 is concerned with the contextual aspect of teaching. As mentioned above, the term *foreign language education* was changed according to the participant's field of study. Except for two teachers of religion and ethics who thought that education in Turkey was going in a positive direction, the rest of the teachers gave negative responses to this question. Halit (Field of Study: Social Sciences, Codes: 8, References: 11) stated:

The curriculum of our field is constantly changing. When we look at the content, we see that students are overwhelmed by too many details. Even if we give these details to the students, our teaching cannot go beyond rote learning.

They memorize the information and forget it in a couple of days. Also, the importance given to education decreased. In the past, education, teaching, or teachers were considered much more important than they are now

The religion and ethics teachers, on the other hand, expressed their content about education in Turkey. Especially, the interactive materials that the MoNE constantly provide for their field, the workshops organized for the development of the religion and ethics education, and the gatherings in which the religion and ethics teachers exchange opinions were the most favored practices of the Ministry by the teachers of religion. They expressed that because of these practices by MoNE, they were able to access and use materials of any nature according to their audience.

Interview question 4: What are your opinions regarding the policies of MoNE towards ELT?

The fourth question regarding the policies of MoNE towards the participants' field of study is concerned with the political aspect of education. The responses to this question were in line with the previous question. Both English and other teachers stated discontent about the policies of MoNE. They thought that education in Turkey was deteriorating because of the constant changes in the curriculum, examination system, teacher education, and teacher recruitment policies. Kemal (Field of Study: Turkish, Codes:12, References: 17) commented:

It seems to me that the Ministry is trying to worsen the education. Especially when we look at the coursebooks provided for the Ministry by private publishing companies, we see such horrible errors that you will be surprised. Half of the texts in the books have no literary or aesthetics value, they have nothing to add to students. There are very heavy poems or texts which we see in 5th or 6th-grade coursebooks. Also as for the national examinations, the questions are too difficult for students. In the past, there were 10 moderate and 10 difficult questions in the high school entrance exams. The low-level and moderate students could do these moderate questions when they studied, and high-level students could perform well in those exams, but now we lost the low-level and moderate students in the first place because they cannot succeed

in the examination no matter what they do. Even high-level students are having a hard time answering the questions.

Interview question 5: In your opinion, what can be done in order to enhance the quality of foreign language education in Turkey?

The fifth question in the interview discusses education in Turkey from a developmental point of view. Both English and other teachers suggested that the Ministry should increase the weekly class hours, introduce reading comprehension training for students, reduce the content density, publish more interactive and student-inclusive coursebooks, put more emphasis on practice rather than theory, reduce the number of students in classes and enhance the physical conditions in schools, rehabilitate the teacher training programs both in universities and in service, and adopt a more selective teacher recruitment policy. Aydan (Field of Study: Mathematics, Codes: 8, References:10) stated:

The density of the content in the curriculum should be reduced. Therefore, weekly class hours would be enough for our lesson. Also, the students who graduated from the Faculty of Education should serve at least two years of internship with more experienced teachers. In addition, the number of students in a classroom should be reduced. In that way, we can take care of every student individually. The physical conditions should be improved. For example, a private lab can be given for every field of study. I mean, there can be Mathematics, English, or Science Labs. Thus, we can have our own classrooms and arrange them according to our own lessons.

Interview question 6: Is there anything you want to mention other than these questions?

For the final remarks of the teachers and in order to cover any possible missing points, a final question was asked to the participants. Most of the teachers responded to this question by summarizing their previous answers and making further suggestions. Semra (Field of Study: Science, Codes:6, References: 9) concluded:

I think, elective courses should have more artistic and sportive content. After the academic courses in the morning, the whole afternoon should be allocated

for these artistic and sportive courses. In my opinion, this kind of content is extremely vital and beneficial for the student's personal development.

Another comment by Ekrem (Field of Study: Science, Codes: 7, References: 9) highlights the necessity for practice in education:

Instead of jumping from one unit to another, we should be giving a more project and practice-based education by reducing the content. It is like cooking. Instead of describing how to cook soup by lengthy explanations, going in the kitchen and cooking soup with our students would be much more educative.

4.4. CONCLUSION

In this chapter of the thesis, quantitative research was carried out with a total number of 150 teachers, namely 46 English Language Teachers and 104 teachers of other school subjects. The questionnaire developed by the researcher of the current paper was administered to the teachers online via Google Forms. According to the results of the questionnaire, a significant difference between the opinions of English teachers and the teachers of other school subjects in items 6, 10, 13, and 15 was found out. The rest of the items provided insignificant results regarding the fields of study.

After the questionnaire, the qualitative part of the research was carried out in order to further explain the results of the quantitative data and to provide a deeper understanding of the research questions. The qualitative research consisted of two parts: observation of the lessons via video recordings and interviews with the volunteering teachers. A total of 40 hours of English lessons and 32 hours of others lessons were recorded. The video recordings were observed using an observation checklist developed by the researcher based mainly on the questionnaire. According to the analysis of the data from video recordings, in items 2, 10, and 14, a statistically significant difference was seen between the practices of the English teachers and other teachers.

The second part of the qualitative research was the interviews. Interviews were carried out with 16 volunteering teachers, namely 6 English teachers and 10 other teachers, among the participants of video recordings. The interviews were also recorded and transcribed afterwards for analysis. The analysis of the transcriptions was

done using Nvivo qualitative analysis tool. According to the results of the analysis, a total of 13 codes and 167 references were created. Teachers' opinions about the modes they used in their lessons and about the general educational practices/policies and their suggestions for quality education were investigated. The results of the interviews showed that a great majority of the teachers were discontent with the applications of the Ministry and they thought that the limitations because of the policies, physical conditions, and materials did not allow them to use various modes as effectively and diversely as they wanted. The results of the research and the comparison of the English and other teachers were discussed in the following chapter in detail.

CHAPTER 5

5. DISCUSSION

5.1. INTRODUCTION

In this chapter, the results of the current research were discussed in detail in relation to the hitherto literature on Multimodality. Firstly a brief summary of the current research was given. After the summary, the discussion of the findings was presented with regard to the research questions.

5.2. A BRIEF SUMMARY OF THE RESEARCH

The present research investigated teachers' use of multimodality mainly in their distance lessons. The first chapter of the thesis consisted of six parts. First, an overview of the background of the research was presented, followed by the statement of the problem, the aim of the research, the significance of the research, organization of the thesis, and operational definitions parts.

Multimodality (i.e. using multiple modes in instruction) is defined as “a way of characterizing communicative situations (considered very broadly) which rely upon combinations of different ‘forms’ of communication to be effective” (Bateman et al., 2017, p.7). With the developments in technology, and the advancements in the ways of reaching the information, 21st-century students are surrounded by multimodal environments. This necessitates teachers to adapt themselves and their practices

accordingly. Therefore, in this thesis, the extent to which the teachers adapt their instruction according to the principles of multimodality was examined.

In the second chapter of the research, the literature review was carried out in four parts, adopting a top-down approach (i.e. from general to specific). Starting from the history of linguistics, the review was narrowed down to the field of semiotics, social semiotics, and multimodality. Finally, it was concluded by an overview of the research in the literature on multimodality.

The third chapter was allocated to the methodology of the research. The investigation of the teachers' use of multimodality was carried out in three parts. Firstly, to gather data about the teachers' opinions on their preferences and practices of multimodality, a 24-item ten-point scale which was adapted from a previously developed questionnaire was administered to a total number of 150 teachers, namely 46 English Language Teachers and 104 teachers of other school subjects. Secondly, video recordings of a total of 40 hours of lessons from 20 English teachers were collected. To compare the differences in the modality preferences of English Language teachers and the teachers of other school subjects such as Mathematics, Science, Turkish, Religion and Ethics and Social Studies, a total of 32 hours of lessons from 16 teachers of these subjects were also recorded. Data from these recordings were collected using a checklist which was developed based on the adapted scale. Finally, to ensure triangulation of the data, interviews were carried out with 16 volunteering teachers, namely 6 English teachers and 10 other teachers that were chosen among the participants of the video recordings. These interviews were also recorded and the conversations were transcribed and analyzed thereafter using Nvivo qualitative analysis tool.

In the fourth chapter, the findings of the research were presented. The results of the research were examined from a descriptive point of view. The sequence in the methodology section was also followed in this chapter. First, the quantitative data analysis was carried out, followed by the analysis of the video recordings and the interview data. The findings of the questionnaire and video recordings showed a similar fashion between English teachers and the teachers of other school subjects regarding their opinions, preferences, attitudes, and practices of Multimodality. Only

in 4 out of 24 items in the questionnaire (i.e. 6th, 10th, 13th, and 15th item), a statistically significant difference between the English teachers and other teachers was found. The results were also similar for the video recordings, with 3 out of 18 items that have a statistically significant difference. Finally, for the analysis of the interviews, Nvivo qualitative analysis tool was used. A total number of 13 codes and 167 references were created according to the transcriptions. The results of the analysis suggested a positive correlation between English and other teachers in terms of their word choices.

5.3. DISCUSSION

In this section, the findings of the current research were discussed in relation to the five research questions. To sum up, the first research question is concerned with the English Language Teachers' beliefs and attitudes regarding multimodality. The second question investigates their actual practices in their lessons. The third question examines the beliefs and attitudes of the teachers of other school subjects regarding multimodality. The fourth question is concerned with their actual practices. Finally, the last research question seeks to determine whether there are any significant differences between the two groups regarding their beliefs and actual practices of multimodality.

5.3.1. English Teachers' Stated Beliefs, Attitudes, and Preferences Regarding Multimodality against Their Actual Practices

With regard to the first and second research question, the results of the research showed a discrepancy between the stated beliefs, attitudes, and preferences of the English teachers and their actual practices. As mentioned above, based on the questionnaire by Şahin (2021), on the literature on multimodality, and the Turkish context, six different modes, namely verbal, visual, auditory, bodily/kinesthetic/gestural, technological, and textual modes, were determined. Most of the English teachers reported intensive use of various modes in their lessons. However, according to the data from video recordings, it was found out that a great majority of them did not use these modes throughout their instruction. The results from the questionnaire and interviews are congruent with previous studies in terms of stated beliefs, preferences, and attitudes. To clarify, both in current research and in previous

studies, teachers stated that they use various modes, hence adopt a multimodal approach in their instruction.

Ajayi (2010), for example, investigated 48 preservice teachers in a state university in California in order to examine their knowledge and perceptions of their teacher education preparation to teach multimodality/multiliteracies. It was found out in the study that preservice teachers were aware of the impact of the new communication technologies on literacy forms, practices, knowledge, and literacy learning and instruction. The participants also commented on the constraints of schools and school districts. Although the participants of the former study were pre-service teachers, the results of the study are consistent with the current research in that the teachers were aware of the benefits of the multimodal instruction but reported discontent about the constraints from the Ministry of National Education which limited their use of various modes in their instruction. 50% of the English teachers (n= 23) stated with 10 points, and 39.1% of them (n=18) with 9 out of 10 points, that using the content from different media channels (e.g. newspapers, television, social media) in the lessons would be beneficial. In addition, Meral (Field of Study: English, Codes: 11, References: 18), commented:

It is impossible to manage solely with the coursebooks provided by the MoNE, without having our students get a supplementary coursebook. Because those books are empty. One can finish a whole unit in 20 minutes. There are not enough activities that we can use in the coursebooks. Also, I think using various materials like visuals, songs, or videos is especially beneficial for vocabulary learning, but our weekly class hours are not sufficient. We cannot find enough time for an extra activity.

The results regarding the first research question are also coherent with other studies such as Yi and Choi's (2015), Ryu and Boggs's (2016), Papageorgiou and Lemeras's (2017), and Tan and Matsuda's (2020) studies. In their study, Yi and Choi (2015) investigated 25 teachers in the USA for their views of multimodal practices in K-12 classrooms. They found out that 23 teachers out of 25 expressed positive opinions about the potential of multimodal practices. However, they also reported concerns about these practices such as the time needed to plan and implement multimodal lessons or a contradiction between multimodal instruction and print-based

evaluation. In conclusion, they stated that there was a critical gap between the theory of multimodal pedagogy and teachers' views of multimodal practices. The teachers in the current research also reported a gap between the curriculum published by MoNE and the materials, coursebooks, and evaluation system in practice. English teacher Gülşen (Codes: 10, References: 15) explained:

The Ministry should publish coursebooks and materials according to what they ask for. I mean, they want students to be competent in listening, speaking, or in other skills, and at the same time, to prepare for the exams, solve problems, answer questions, etc. But when we look at the materials or textbooks they provide, the content is only concerned with the theoretical aspect of the language. They should provide textbooks and materials that are suitable to the requirements they publish in the curriculum. Using various activities in the classroom is really beneficial for developing the four skills. The opportunities in which students are exposed to English should be provided.”

The results of the present research are also in line with the study by Ryu and Boggs (2016) in which teachers' perceptions about multimodality were investigated. In their study, five teachers working at middle and high schools in South Korea were selected on the basis of purposeful sampling. According to the results, teachers reported positive effects of multimodality on their students' motivation to write. They also commented that they were interested in the use of technology and various texts because traditional methods were ineffective in fostering learners' engagement. Teachers' also commented on their perceptions about student participation. According to their views, the students were more willing and excited about actively participating in cooperative activities and reflective learning. 56.5% of the English teachers (n=26) in the present research responded with 10 points, and 30.4 of them (n=7, and n=7 equally) with 8 and 9 points, that they prefer preparing interactive presentations using music, visuals, and/or animations.

Finally, in Papageorgiou and Lemeris's (2017) study, teachers' experiences, approaches, and practices regarding multimodality were investigated with a thematic analysis approach. 30 teachers from Germany, 20 teachers from Finland, and 18 teachers from Denmark participated in their study, and the data were collected online

using an adapted version of Fleming's (1987) VARK questionnaire. The adapted version of the questionnaire consisted of 28 closed and semi-structured questions, and three themes emerged as a result of the data analysis. It was found out that the teachers viewed multimodality as a means for imparting information, enacting collaborative learning, and preparing students for exploring concepts, and that more than half of the teachers from Germany, Finland, and Denmark reported using multimodal means of instruction (i.e. visuals, technology, or internet) in their practice. The questionnaire results of the current research showed a similar fashion to the results of Papageorgiou and Lemeris's (2017) study. 73.9% of the English teachers (n=34) in the current research stated that they thought the visual, audial, and interactive contents were more effective. In addition, 69.6% of them (n=32) also responded that video-supported teaching had a positive effect on learning.

As for the Turkish context, although a comparison could not be made in terms of the teachers' actual practices, some of the findings of the previous studies can be associated with the current research. According to the results of Ekşi and Yakışık's (2015) study, for example, pre-service EFL teachers have high multimodal literacy levels. Furthermore, a positive correlation was observed between the teachers' multimodality skills and the time spent online. The results of the present research suggested a similar outcome. The participants reported that before distance education, their lessons were more monomodal. However, with distance education, apart from the limitations of physical distance, their awareness of multimodal instruction increased greatly. Halit (Field of Study: Social Sciences, Codes: 8, References: 11) for example, commented:

Of course, there is a huge difference between face-to-face and distance education. Issues like physical connection or eye contact were quite important. But there are lots of benefits as well. In time, we learned how to use different tools or platforms in our instruction. I used to teach verbally, using the coursebook and dictation. But now, I'm more technology-oriented. I mean, I teach with visuals that I obtained from online education platforms, videos about the day's subject, or even clips from YouTube.

To sum up, the results from the questionnaire and interview in the current research are in line with the aforementioned studies. However, for the video

recordings, the results concerning the English teachers' actual practices are incongruent with the teachers' stated beliefs, preferences, and practices within the present research. While the participants reported that they used multimodality in their lessons, the actual practices were different. A great majority of them used only one mode in their lessons, that being mainly the verbal mode. However, since in the studies above (i.e. Ajayi, 2010; Yi & Choi, 2015; Ryu & Boggs, 2016; Papageorgiou & Lemeras; 2017 Tan & Matsuda, 2020), an observation of the lessons was not made, the actual practices of the teachers remained unexplored, thus precluding a comparison between those studies and the current research in practical aspects. In addition, since the studies in Turkish context were limited with the subjects of multimodal literacy (Bulut et al., 2015; Ekşi & Yakışık, 2015; Ulu et al., 2017; Ulu & Tuncay, 2017), or digital literacy practices of pre-service teachers (Akayoglu et. al., 2020) a comparison between the results of the current research and the results of the previous studies in Turkish context regarding the beliefs, attitudes, and preferences of the in-service teachers towards multimodality, and their actual practices could not be made.

5.3.2. Other Teachers' Stated Beliefs, Attitudes, and Preferences Regarding Multimodality against Their Actual Practices

This part of the discussion is concerned with the third and fourth questions of the thesis, which are the stated beliefs, attitudes, and preferences of other teachers, and their actual practices. Since there was no significant difference between English teachers and other teachers except for four items in the questionnaire results, and three items in the observation results, it can be suggested that there is also an incongruence between the stated beliefs, attitudes, and preferences of other teachers and their actual practices regarding multimodality. The findings of the questionnaire and the interview suggest that teachers of other school subjects prefer using various modes in their instruction. 18.4% (n=19), 20.4% (n=21), and 37.9% (n=39) of other teachers reported that they preferred preparing interactive presentations using music, visuals, and/or animations with 8, 9, and 10 points respectively. However, although in more than half of their lessons, diagrams, tables, or pictures were used to some extent, in 90.6% of their lessons (n=29) music was never used while in 75% of them, animations or video recordings were never used according to the results of the observations. In addition, most of the diagrams, tables, or pictures used in their lessons were the visuals in the

coursebooks. On the other hand, while 14.6% (n=15), 13.6% (n=14), and 33% (=34) of them reported using technological tools (e.g. Edmodo, Google Classroom, Kahoot) to help students understand the subject better with 8, 9, and 10 points respectively, in 62.5% (n=20) of their lessons, websites, or internet were never used, and in none of their lessons (n=32) technological tools (i.e. apps) were used. According to the participants, the reason behind the teachers' lack of using various modes in their instruction was the limitations that were mentioned above. Hülya (Field of Study: Mathematics, Codes:9, References: 11) for example, commented:

Since the curriculum is too intense, we cannot differentiate our instruction. We are in a haste to catch up with the schedule. If we want to do a different activity out of the curriculum, or if we want to attend a student who does not understand the topic, we instantly fall behind the schedule.

As mentioned above, since all of the previous research regarding the teachers of other school subjects in the Turkish context was concerned with the pre-service teachers, and especially with their multimodal literacy levels, preferences, and practices, a comparison regarding the in-service teachers' beliefs, attitudes, preferences and actual practices of multimodality between the current research and the previous literature in the Turkish context was not possible. However, the results of the questionnaire and the interview in this research could be compared with the previous literature from a multimodal literacy point of view. It was found out that the results of the present research are incongruent with some of the previous literature (e.g. Tüzel, 2013) in terms of the multimodal literacy levels, preferences, and practices of the teachers, and in line with some of them (e.g. Carvalho, 2019) in terms of the benefits of multimodality.

Tüzel (2013) investigated prospective Turkish language teachers' views regarding multimodal literacy teaching and found that the prospective teachers needed to develop new skills for multimodal literacy. In his study, 61 student teachers studying at Çanakkale 18 Mart University Turkish Teaching Department participated. It was found out that nearly all of the students did not have an awareness regarding the multimodal text structure. 47 of them reported that they had never heard of the term before, while 11 of them reported that they could not remember whether they had heard or not. Two-third of the participants expressed positive opinions about the use of

multimodal texts in Turkish lessons while the rest commented that multimodal texts should not be included in Turkish lessons. Nearly all of the participants reported that the education they had got at university regarding multimodal literacy had been insufficient.

60.2% (n=62), 21.4% (n=22), and 10.7% (n= 11) of the teachers of other school subjects that participated in the current research reported that they thought the presentations with visual, audial, and interactive content were more effective with 10, 9, and 8 points respectively. In addition, 57.3 (n= 59), 17.5% (n=18), and 12.6 (n=13) of them expressed with 10, 9, 8 points respectively that they used visual elements in addition to the verbal lectures. Finally, 47.6% (n=49), 15.5% (n=16), and 19.4% (n=20) of them stated with 10, 9, and 8 points respectively that they preferred using visuals such as graphics, tables, pictures, or photos in their texts. All of these results suggest that the teachers of other school subjects that participated in the current research have a high level of awareness regarding multimodal text structure.

On the other hand, in his study, Carvalho (2019) investigated 82 pre-service science teachers in terms of their perceptions of multimodality. In his study, the actual practices of the pre-service teachers were examined through interviews and students' responses instead of an actual observation process. According to the self-reported data from the participants, multimodal instruction in science education might help students in understanding the subjects better in science courses. The results from the current research also suggest a similar idea. The teachers of other school subjects that participated in this research stated that using as many semiotic registers as possible in instruction helped students remember and understand the subject matter better. Science teacher Semra (Codes:6, References: 9), for example, commented:

I mostly use video-based teaching in my instruction. Because the students remember the subjects more easily when the lessons are reinforced with pictures, diagrams, or other visuals. I also use models and make experiments with materials that the students can easily find in their houses. Therefore, they become quite interested and participate more eagerly.

In addition to these, there are other studies the results of which can be related to the current research. İşçitürk and Turan (2018) for example, investigated the religion

and ethics teachers' opinions about education informatics network (EBA). The teachers in the study stated that the digital content that the MoNE provided for their field of study was insufficient. Also, while half of the participants reported that they had some kind of information about the digital database of MoNE, the other half stated that they either received no education or had insufficient information. The results of this study are incoherent with the results of the present research. In fact, the only group in this research that was content with the applications of MoNE was the religion and ethics teachers' group. They stated that as compared with the past, there were countless resources that the MoNE provides for their field.

In another study, Bakioğlu and Çevik (2020) examined the science teachers' views on distance education and found that the distance education process had a positive effect on their personal development. Because of the distance education process, the teachers were compelled to improve themselves, thus adopting a more technological approach in their instruction. This result is also congruent with the results of the present research. Most of the participants reported that throughout the distance education process, they learned how to use different means of instruction (i.e. technology, web 2.0 tools) more effectively in their lessons.

5.3.3. Comparison of English Teachers and the Teachers of Other School Subjects in terms of Their Stated Beliefs, Attitudes, and Preferences Regarding Multimodality, and Their Actual Practices

The fifth and final research question investigates the English teachers and other teachers from a comparative point of view in terms of multimodality. The comparison between the two groups was undertaken in three parts. Firstly, the results from the questionnaire, secondly, the interviews, and finally the observations were examined.

The results of the research suggest that there is no significant difference between English teachers and other teachers in terms of their views and actual practices of multimodality except for four items in the questionnaire results, and three items in the observation results. According to the results of the quantitative investigation, there is a significant difference between English teachers and the teachers of other school subjects in items 6, 10, 13, and 15 (see Table 4).

Firstly, the 6th item in the questionnaire regarding the benefits of using the content from different media channels (e.g. newspapers, television, social media) in the lessons yielded field-specific results. The results showed that 88.3% of the total number of other teachers believed in the benefits of using the content from different media channels. On the other hand, the percentage of English teachers who thought that the content from different channels was beneficial was 91.3% which showed that English language teachers favored using the content from different media channels (e.g. newspapers, television, social media) in the lessons significantly more than the teachers of other school subjects (see Table 13).

Item 10 in the questionnaire concerning the use of text, sound, and visual elements together in communication also yielded significantly different results in terms of the field of study. According to the results, 52.2% of the English teachers (n=24) thought that this type of communication was never boring. On the other hand, 56.3% of the other teachers (n=58) expressed opinions in that direction, which means that other teachers thought more significantly than English teachers that *communication in which text, sound, and visual elements were used together were not boring* (see Table 17).

Item 13 investigates the teachers' beliefs regarding the power of verbal expression when sharing their opinions. 28.3% of English teachers (n= 13) responded that they never believed in the power of solely verbal expression when sharing their opinions. However, nearly half of the other teachers (n= 48) expressed opinions in that direction. The results show that English teachers favored the power of verbal expression when sharing their opinions significantly more than other teachers (see Table 20).

The final item in the questionnaire that yielded field-specific results is item 15 concerning the use of technological tools (e.g. Edmodo, Google Classroom, Kahoot) in the lessons. 47.8% of English teachers (n= 22) stated that they always preferred using these tools in their instruction while 33% of other teachers (n=34) expressed opinion within this direction. As the results suggest, English teachers preferred using technological tools significantly more than other teachers (see Table 22).

As for the observations, the analysis of the data from the video recordings was undertaken in two parts. Firstly, the in-group comparisons were done in terms of the teachers' views and their actual practices of multimodality separately, then the two groups were compared in terms of these aspects. The stated beliefs, attitudes, and preferences of both groups were inconsistent with their actual practices in that, both of the groups reported a vigorous use of multimodality in their instructions, however according to the results from the observations, a great majority of them used only one mode in their lessons, that being mainly the verbal mode.

For the comparison of the two groups, the analysis of the data yielded significantly different results only for items 2, 10, and 14 according to the chi-square results. In the crosstabs of item 2 examining the use of verbal lectures, it was seen that other teachers used verbal lectures significantly more than English teachers (see Table 36). 10th item also received field-specific responses from the teachers. According to the crosstabs, in 55% of English lessons (n=22), websites and/or the internet were used to various extents. However, the number of other lessons in which these modes were used was 12 with a percentage of 37.5% (see Table 44). It can be suggested from these results that English teachers used websites and/or the internet significantly more than other teachers. Lastly, item 14 concerning the use of gestures and facial expressions yielded significantly different results in terms of the field of study. In 42.5% of English lessons (n=17), gestures and/or facial expressions were used by the teacher, while in 40.6% of other lessons (n=13), these resources were used (see Table 48). The results showed that English teachers used gestures and/or facial expressions in the lessons significantly more than other teachers.

As for the interviews, the two groups were compared in terms of their word choices and the analysis of the data yielded a Pearson correlation coefficient of .61 (see Table 51). The coefficient suggests a positive correlation between the word choices of English teachers and the teachers of other school subjects. In addition, according to the crosstabs (see Table 52), both English teachers and other teachers preferred using most of the modes (i.e. verbal, textual, visual, auditory, bodily/kinesthetic/gestural, technological) in their practices. The results of both groups also showed similarities in terms of the misapplications of the Ministry and insufficient materials. Both groups thought that the materials they were provided were insufficient,

and the applications and the policies of the Ministry of Education should be changed in a way to enhance the quality of education.

To sum up, the results of the research revealed incongruence between the actual practices of the teachers, and their stated beliefs, attitudes, and preferences regarding multimodality. However, when the two groups (i.e. English teachers and the teachers of other school subjects) were compared, both of them showed a similar fashion in terms of these aspects. Only in 4 out of 24 items in the questionnaire (i.e. 6th, 10th, 13th, and 15th item) and in 3 out of 18 items (i.e. 2nd, 10th, and 14th item) in the video recordings checklist, a statistically significant difference was found. A positive correlation was also found in the results of the interviews.

With regard to the literature on the subject, there are no studies that compare the EFL teachers and the teachers of other school subjects from a multimodality perspective. However, the results of some studies can be related to the present research. In a study by Leshem and Markovits (2013), for example, mathematics and English teachers were compared in terms of their views on the ways of teaching and issues of anxiety. Four interviews were conducted with five teachers (i.e. two mathematics and three English teachers) and the teachers reported the need to learn a lot of rules as a source of anxiety. Another reason that was stated by the teachers as a source for tension was the social pressure by the educational institutions and by the parents. The data of the present research suggested a similar outcome. Both English teachers and other teachers stated that excessive theoretical instruction affected students in a negative way. Also, the pressure by the applications of the Ministry (i.e. examinations, or the requirements of the curriculum), hindered the practical aspect of the education. On this subject, Fatma (Field of Study: English, Codes:10, References: 11) commented:

We are very good at theoretical aspects of English. But I can't say the same thing for the practice. When I ask the students how many tenses there are in English, they can give the correct answer in an instant. However, when I want them to complete a simple task like asking for permission to go out, they just stand and stare. This is mostly because of the curriculum and the examination system. We cannot deviate from the curriculum because of the exams and in time the students forget how to use the language other than answering exam questions. So, while they speak perfect English for their level

when they start secondary school at 5th grade, at the end of the 8th grade, they become even worse than how they were four years ago.

In another study by Tm and Emre (2017), speaking activities in Turkish and English language teaching coursebooks were compared and it was found out that the books served the theoretical aspects of language more than the practical aspects. It was suggested in the study that the curriculum and the coursebooks should be reviewed and enhanced in order to include content that fosters communication. These results are also consistent with the results of the present research. Both parties in this study (i.e. English and other teachers) agreed that the current curriculum and the coursebooks provided by the MoNE were full of excessive theoretical content most of which was unnecessary for the students. Many of the teachers suggested a change in the content of the curriculum and the coursebooks in order to promote a more practical education.

Finally, Gruson et al. (2018) in their case study, investigated two mathematics and English teachers in terms of their use of digital resources. Similar to the current research, they also compared the teachers' statements and their actual practices. The study consisted of two main phases: first questionnaires and interviews with the teachers, second video recordings of the lessons. It was found out that both of the teachers used various digital resources. While they still used print coursebooks, they also benefited from the internet. However, the teachers in the study reported that while they used various resources in their instruction, they should follow the requirements of the curriculum. This is also coherent with the results of the current research. The teachers in the research commented that while they used various resources in their instruction as much as possible, they still needed to follow the curriculum. Mathematics teacher Hlya (Codes:9 References: 11) stated, for example:

I try to use as many resources as possible. Depending on the circumstances, I use visuals or resources on the internet. However, especially in 8th grades, since there is an exam approaching, we have to stick by the curriculum.

CONCLUSION

This chapter of the thesis consists of the final remarks and considerations of the researcher. Also, the pedagogical implications of the results were presented. Finally, the chapter was concluded with the limitations of the research and the suggestions for further research.

Pedagogical Implications of the Research

Multimodality or multimodal instruction, a widely used term in today's educational circles, has gained popularity since its first appearance in the mid-1990s. There are countless studies in the literature regarding teachers' beliefs, perceptions, and practices of multimodality, students' perspectives on multimodality, the impact of multimodality, multimodal analysis, the concept of multimodality, cognition and multimodality, multimodal literacy, multimodality and social semiotics. However, despite the abundance of research on multimodality, the studies on the subject mainly focus on pre-service teachers and/or the teachers' beliefs, attitudes, and preferences of multimodality. Furthermore, the number of studies on the actual practices of the teachers from a multimodality point of view is relatively few. Most of the existing research on teachers' actual practices is based on the *statements* of the teachers or students. In the Turkish context, this gap is even bigger.

The present research is unique in investigating the beliefs, preferences, attitudes, and most importantly the actual practices of in-service teachers, who are actively working at state schools in Turkey, from a multimodality perspective. By doing so, this research highlights the vital importance of multimodality and yet the scarcity of studies on the field, especially in the Turkish context. In a century where the students are surrounded by multimodal environments, it becomes a necessity for the teachers to equip themselves with multimodal instruction skills. Therefore, it is expected by the pioneering of this research, the studies on the field of social semiotics and multimodality gain pace in the Turkish context. On the other hand, according to the general impression from the research, the pedagogical implications can be discussed under four parts: firstly, the examination of the subject from a teacher education point of view, secondly from the Ministry of National Education point of

view, thirdly from the teachers' personal development perspective, and finally from in-class practical point of view.

Firstly, one of the main complaints of the teachers throughout the research was the insufficiency of the education they got at the universities regarding multimodality. Most of them reported that they did not get a formal education on multimodal instruction. Instead, they developed themselves with experience in time, thus adopted a somewhat multimodal way of teaching. However, these implementations cannot go beyond personal practices and cannot be disseminated and standardized throughout the educational system. In light of this information, the first thing that should be taken into consideration is that multimodality can be made an exclusive part of teacher education programs in universities. However, in doing this, a more practical way should be followed rather than a theoretical one. The opportunities where student teachers can put the theory into practice should be provided. This can be ensured by a more effective internship program.

Secondly, as seen in the qualitative investigations, one of the most referred points (i.e. codes) in the interview was *misapplications of the MoNE*. Apart from the inadequacies in teacher education programs, the policies and practices of MoNE regarding multimodality were seen as insufficient by the teachers. Most of them suggested that the Ministry should adopt an effective in-service training program. A wide majority of the existing in-service training provided by the MoNE cannot go beyond theoretical applications that were done just for the sake of doing. Therefore, with the insight gained by this research, the Ministry of National Education can constitute a functional in-service training program for the teachers by which they can further develop their multimodal instruction skills on a sustainable basis.

The next implication that can be suggested by this research is the personal development of teachers. As mentioned above, most of the teachers tried to use multiple semiotic modes as much as possible in their instruction. However, since they did not get a formal education from a reliable source, these practices were not carried out in an organized and professional manner. They only used multimodal mediums arbitrarily as a result of their experiences, during the flow of the lessons. Therefore, the lessons in which a zero percent of multiple modes were used can be seen after a lesson full of multimodal instruction. In this vein, with the guidance of this research,

educational authorities or even teachers can create resources that provide satisfactory information for the application and adoption of multimodality in instruction, resulting in a raise in the multimodal awareness of firstly the teachers individually, then schools, and finally the whole education system. In the long term, the results of this study are expected to bring about vigorous nationwide action research to disseminate the benefits of multimodal instruction. On the other hand, as implied by the results of the research, since teachers, students and the educational authorities realized the benefits of the online education, it can be suggested that the future of education will not solely depend on the face-to-face instruction as it was in the past. It can be expected that there will be a more blended design where both distance and face-to-face education contexts co-exist in our lives. Therefore, with this in mind, teachers should follow the innovations in the field in order to be ready to meet the requirements of the blended education.

Finally, from a practical point of view, it is a long-known fact that various students might have various learning styles including visual, audial, analytical, and bodily/kinesthetic learning. As suggested by the results of the current research, multimodality was regarded as quite beneficial both by students and teachers in meeting the requirements of these various learning styles. Therefore, instead of using a single predetermined method for every student, teachers should plan their lessons according to the needs and interests of their students. This can be achieved by integrating multimodal resources in our instruction as much as possible. An ideal lesson should include methods, techniques, and content that address as many different learning styles as possible. An example of a multimodal lesson sequence can be described as follows: first, the teacher can start the lesson with a brainstorm that draws students' attention to the lesson and fosters active participation, next s/he can show visuals or have students listen to an audio recording to inform them about the content of the lesson, after this, deliver the content in an interactive environment (e.g. using websites, interactive coursebooks), then ask students to complete controlled activities about the day's topic using their bodies (e.g. roleplay, drama), finally carry out follow-up activities in which students can create their own content according to what they learned from the lesson.

Limitations of the Research

The present research was intended as a comparative investigation between English teachers and the teachers of other school subjects. However, because of the bureaucratic and temporal limitations, a thorough comparison between the schooling levels in terms of multimodality could not be carried out. The teachers were compared regardless of their demographics and schooling levels.

In addition, the observations and the interviews in this research were limited to the six main fields of study in state schools, namely English, Turkish, Mathematics, Science, Social Sciences, and Religion and Ethics. The practices of other fields of study remained unexplored. The teachers that were observed and interviewed were all working at secondary schools.

Finally, the current research was carried out only in distance lessons. Therefore, the questionnaire, interviews, and observations of the teachers' actual practices were limited to the online lessons only. It should be taken into consideration that actual practices in face-to-face lessons and distance lessons might differ.

Suggestions for Future Research

Based on the evidence from the research data and the limitations of the research, it can be suggested that further studies focusing on a thorough comparison of the teachers at different schooling levels regarding their use of multimodality can be conducted. In addition, other variables such as the background of the participants, school district, and physical conditions of the schools, can be taken into consideration in the future research.

Furthermore, this research compared the six main fields of study (i.e. English, Turkish, Mathematics, Science, Social Sciences, and Religion and Ethics) in terms of multimodality. Other fields of study remained unresearched. Future studies comparing different fields of study such as Literature, Physics, Chemistry, Visual Arts, Physical Education, and Music could contribute to the literature greatly.

Another aspect that should be paid attention to is the actual practices of the teachers. As mentioned above, only distance lessons were investigated in the present

research. For this reason, other studies examining the teachers' practices in their face-to-face lessons would be invaluable for multimodality literature.



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APPENDICES

Appendix A: Multimodal Literacy Scale

Değerli öğretmen adayı;

Aşağıda yazı, ses ve görsel öğelerin bir arada kullanıldığı ortamlardaki iletiyi anlamlandırma ve bu ortamlara yönelik ileti oluşturma ile ilgili 17 ifade yer almaktadır. Bu ifadeleri dikkatlice okuduktan sonra, size uygunluk derecelerine göre 1'den 5'e kadar olan numaralardan birini işaretleyerek görüşünüzü belirtiniz. Lütfen sadece bir seçeneği işaretleyiniz ve boş bırakmaya özen gösteriniz. Yanıtlarınız kesinlikle gizli tutulacaktır. Sağladığınız katkıdan dolayı teşekkür ederiz.

Benim İçin Hiç Uygun Değil	Benim İçin Tamamen Uygun				
	1	2	3	4	5
1. Müzik, görsel ve animasyon gibi unsurlardan yararlanarak etkileşimli bir sunu hazırlarım.	1	2	3	4	5
2. Yazılarımda grafik, tablo, resim ve fotoğraf gibi görseller kullanırım.	1	2	3	4	5
3. Yazı, ses ve görüntünün bir arada olduğu ortamlarda kendimi daha rahat ifade ederim.	1	2	3	4	5
4. Sunumlarımda farklı görsel öğeler (tablo, grafik gibi) sayesinde düşüncelerimi sistematik şekilde organize ederim.	1	2	3	4	5
5. Sunumlarımda farklı unsurları (müzik, görüntü gibi) kullanmak anlaşılmanı kolaylaştırır.	1	2	3	4	5
6. Farklı ortamlarda (gazete, televizyon, sosyal medya vs.) sunulan içeriğin doğru olup olmadığına karar verebilirim.	1	2	3	4	5
7. Bir kişiyi dinlerken onun sergilediği beden diline önem veririm.	1	2	3	4	5
8. Görsel, işitsel ve yazılı unsurların bireyleri nasıl etkilediğini fark ederim.	1	2	3	4	5
9. Farklı medya araçlarında yer alan görsel ve sözel bilgiyi birbiriyle ilişkilendiririm.	1	2	3	4	5
10. Birçok kaynaktan yararlanarak bir araya getirdiğim bilgileri yorumlarım.	1	2	3	4	5
11. Ulaştığım bilgileri görsel ve işitsel öğeler aracılığıyla ilişkilendiririm.	1	2	3	4	5
12. Konuşurken seçtiğim sözcüklere uygun beden dili kullanırım.	1	2	3	4	5
13. Görüntüleri, sesleri, grafikleri ve yazıları aynı anda yorumlamaya çalışmak hoşuma gitmez.	1	2	3	4	5
14. Yazı, ses ve görsel öğelerin bir arada kullanıldığı iletişimden sıkılırım.	1	2	3	4	5
15. Görsel, işitsel ve yazılı unsurların bir arada kullanıldığı elektronik ortamlarda dikkatim dağılır.	1	2	3	4	5
16. Görsel, işitsel ve yazılı unsurların bir arada kullanılması düşünce tembelliğine yol açar.	1	2	3	4	5
17. Düşüncelerimi paylaşırken yalnızca sözel ifadenin gücüne inanırım.	1	2	3	4	5

Appendix B: Multimodal Teaching Scale

English Version

Dear colleague;

The aim of this research is to investigate the opinions of the teachers of MoNE regarding multimodal instruction. In its simplest terms, multimodality is using more than one medium of instruction together (e.g. visuals, music, body language, print materials, technological tools) in the lessons. Below are statements concerning multimodal instruction. Please mark the option that is most suitable for you on a scale of 1-10.

	1: totally unsuitable 10: totally suitable									
	Yes					No				
1. Have you ever heard of the term multimodality? Have you got a formal education on this subject at university or later?										
2. If your answer for the first question is "Yes", please define the education you got, if "No", please skip this question.										
1. I prefer preparing interactive presentations using music, visuals, and/or animations in my lessons.	1	2	3	4	5	6	7	8	9	10
2. I prefer using visuals such as graphics, tables, pictures, or photos in my texts.	1	2	3	4	5	6	7	8	9	10
3. The contexts where texts, images, and sounds are together, help me express myself more comfortably.	1	2	3	4	5	6	7	8	9	10
4. Various visual elements (e.g. tables, graphics) in my presentations help me organize my thoughts systematically.	1	2	3	4	5	6	7	8	9	10
5. Using various elements (e.g. music, visuals) in presentations facilitate comprehension.	1	2	3	4	5	6	7	8	9	10
6. I think using the content from different media channels (e.g. newspapers, television, social media) in the lessons can be beneficial.	1	2	3	4	5	6	7	8	9	10
7. When listening to someone, the body language s/he uses is important for me.	1	2	3	4	5	6	7	8	9	10
8. I try to use body language that is suitable to the words I use while speaking.	1	2	3	4	5	6	7	8	9	10
9. I prefer interpreting images, sounds, graphics, and texts at the same time.	1	2	3	4	5	6	7	8	9	10
10. Communication in which text, sound, and visual elements are used together is boring.	1	2	3	4	5	6	7	8	9	10
11. Electronic environments in which visual, audial, and written elements are used together are distracting.	1	2	3	4	5	6	7	8	9	10
12. Using visual, auditory, and written elements together can lead to mental laziness.	1	2	3	4	5	6	7	8	9	10
13. I believe only in the power of verbal expression when sharing my opinions.	1	2	3	4	5	6	7	8	9	10

14. In my lessons, I use visual elements in addition to verbal lectures.	1	2	3	4	5	6	7	8	9	10
15. I prefer using technological tools (e.g. Edmodo, Google Classroom, Kahoot) to help students understand the subject better.	1	2	3	4	5	6	7	8	9	10
16. I think using multiple modes (e.g. written, verbal, visual, auditory) together will distract students.	1	2	3	4	5	6	7	8	9	10
17. I avoid using my body language while teaching.	1	2	3	4	5	6	7	8	9	10
18. I think the most useful method is direct instruction.	1	2	3	4	5	6	7	8	9	10
19. I think that video-supported teaching can have a positive effect on learning.	1	2	3	4	5	6	7	8	9	10
20. I think presentations with visual, audial, and interactive content are more effective.	1	2	3	4	5	6	7	8	9	10
21. I cannot express myself comfortably in contexts where there is only one type of communication (e.g. verbal/written)	1	2	3	4	5	6	7	8	9	10
22. I pay attention to the body language of the person I communicate with.	1	2	3	4	5	6	7	8	9	10
23. Contexts where multiple modes (written. oral. visual. auditory) are used are confusing.	1	2	3	4	5	6	7	8	9	10
24. Contexts where multiple modes (written. oral. visual. auditory) are used are confusing.	1	2	3	4	5	6	7	8	9	10

Turkish Version

Değerli meslektaşım;

Bu çalışmanın amacı Milli Eğitim Bakanlığı öğretmenlerinin çok modlu öğretim hakkındaki görüşlerini almaktır. Çok modlu öğretim en temel ifadeyle, derslerde birden fazla öğretim unsurundan (görseller, müzik, beden dili, yazılı materyaller, teknoloji vb.) aynı anda yararlanmak anlamına gelmektedir. Aşağıda çok modlu öğretimle ilgili ifadeler yer almaktadır. Lütfen 1'le 10 arası size uygun olan ifadelerden birisini işaretleyiniz.

	1: hiç uygun değil 10: tamamen uygun									
1. Daha önce "multimodality" (çok modlu/çok katmanlı öğretim) kavramını duydunuz mu? Bu konuda üniversite hayatınız boyunca veya daha sonradan herhangi bir eğitim gördünüz mü?	Evet					Hayır				
2. 1. soruya cevabınız "Evet"se aldığınız eğitimi tanımlayınız. "Hayır"sa bu soruyu atlayınız.										
1. Derslerimde müzik, görsel ve animasyon gibi unsurlardan yararlanarak etkileşimli sunular hazırlamayı tercih ederim.	1	2	3	4	5	6	7	8	9	10

2. Yazılarımda grafik, tablo, resim ve fotoğraf gibi görseller kullanmayı tercih ederim.	1	2	3	4	5	6	7	8	9	10
3. Yazı, ses ve görüntünün bir arada olduğu ortamlar kendimi daha rahat ifade etme imkanı sağlar.	1	2	3	4	5	6	7	8	9	10
4. Sunumlarımdaki farklı görsel öğeler (tablo, grafik gibi) düşüncelerimi sistematik şekilde organize etme imkanı sağlar.	1	2	3	4	5	6	7	8	9	10
5. Sunumlarda farklı unsurları (müzik, görüntü gibi) kullanmak anlaşılmayı kolaylaştırır.	1	2	3	4	5	6	7	8	9	10
6. Farklı ortamlarda (gazete, televizyon, sosyal medya vs.) sunulan içeriğin derslerde kullanılmasının faydalı olacağını düşünüyorum.	1	2	3	4	5	6	7	8	9	10
7. Bir kişiyi dinlerken onun sergilediği beden dili benim için önemlidir.	1	2	3	4	5	6	7	8	9	10
8. Konuşurken seçtiğim sözcüklere uygun beden dili kullanmaya çalışırım.	1	2	3	4	5	6	7	8	9	10
9. Görüntüleri, sesleri, grafikleri ve yazıları aynı anda yorumlamayı tercih ederim.	1	2	3	4	5	6	7	8	9	10
10. Yazı, ses ve görsel öğelerin bir arada kullanıldığı iletişim sıkıcıdır.	1	2	3	4	5	6	7	8	9	10
11. Görsel, işitsel ve yazılı unsurların bir arada kullanıldığı elektronik ortamlar dikkat dağıtıcıdır.	1	2	3	4	5	6	7	8	9	10
12. Görsel, işitsel ve yazılı unsurların bir arada kullanılması düşünce tembelliğine yol açabilir.	1	2	3	4	5	6	7	8	9	10
13. Düşüncelerimi paylaşırken yalnızca sözel ifadenin gücüne inanırım.	1	2	3	4	5	6	7	8	9	10
14. Derslerimde sözlü anlatıma ek olarak görsel öğelerden de yararlanırım.	1	2	3	4	5	6	7	8	9	10
15. Öğrencilerin konuyu daha iyi anlamalarını sağlamak için teknolojik araçlar (edmodo, google classroom, kahoot vs.) kullanmayı tercih ederim.	1	2	3	4	5	6	7	8	9	10
16. Birden fazla modun (yazılı, sözlü, görsel, işitsel) bir arada kullanımının öğrencilerin dikkatini dağıtacağını düşünüyorum.	1	2	3	4	5	6	7	8	9	10
17. Ders anlatımı esnasında beden dilimi kullanmaktan kaçınırım.	1	2	3	4	5	6	7	8	9	10
18. En faydalı yöntemin düz anlatım yöntemi olduğunu düşünüyorum.	1	2	3	4	5	6	7	8	9	10
19. Video destekli anlatımın öğrenmeye olumlu etkisi olacağını düşünüyorum.	1	2	3	4	5	6	7	8	9	10
20. Görsel, işitsel ve interaktif içerikli sunuların daha etkili olduğunu düşünüyorum.	1	2	3	4	5	6	7	8	9	10
21. Sadece tek bir iletişim türünün (örn: sözlü/yazılı) bulunduğu ortamlarda kendimi rahat ifade edemem.	1	2	3	4	5	6	7	8	9	10
22. İletişim kurduğum kişinin beden diline dikkat ederim.	1	2	3	4	5	6	7	8	9	10

23. Birden fazla mod (yazılı, sözlü, görsel, işitsel) kullanılan ortamlar kafa karıştırıcıdır.	1	2	3	4	5	6	7	8	9	10
24. Görsel, işitsel, sözlü ve yazılı içerikleri ayrı ayrı yorumlamayı tercih ederim.	1	2	3	4	5	6	7	8	9	10



Appendix C: Multimodal Classroom Observation Checklist

Name of the Observee :

Lesson :

Session :

1= never 10= always	1	2	3	4	5	6	7	8	9	10
Linguistic design										
Used voice and intonation										
Used verbal lectures										
Used other verbal resources										
Textual Design										
Used written texts										
Used coursebook										
Used other print/textual/written resources										
Visual Design										
Used diagrams, tables or pictures										
Used animations or video recordings										
Used other visual aids										
Audial Design										
Used music along with the lecture										
Used audio recordings										
Used other auditory resources										
Technological design										
Used websites, internet										
Used technological tools (i.e. apps)										
Used other technological resources										
Bodily/Kinesthetic/Gestural design										
Used body language										
Used gestures and/or facial expression										
Used other bodily resources										
Comments of the researcher										

Appendix D: Crosstabs of the Questionnaire Results

Table 6.

Crosstabs for Item 2

Item 2		2. I prefer using visuals such as graphics, tables, pictures, or photos in my texts.								Total
		2	3	5	6	7	8	9	10	
English	Count	1	0	1	0	4	8	16	16	46
	% within Field of Study	2.2%	.0%	2.2%	.0%	8.7%	17.4%	34.8%	34.8%	100.0%
	% of Total	.7%	.0%	.7%	.0%	2.7%	5.4%	10.7%	10.7%	30.9%
Other	Count	5	1	0	5	7	20	16	49	103
	% within Field of Study	4.9%	1.0%	.0%	4.9%	6.8%	19.4%	15.5%	47.6%	100.0%
	% of Total	3.4%	.7%	.0%	3.4%	4.7%	13.4%	10.7%	32.9%	69.1%

Table 7.

Crosstabs for Item 3

Item 3		3. The contexts where texts, images, and sounds are together, help me express myself more comfortably.								Total
		2	3	5	6	7	8	9	10	
English	Count	1	0	1	0	2	5	13	24	46
	% within Field of Study	2.2%	.0%	2.2%	.0%	4.3%	10.9%	28.3%	52.2%	100.0%
	% of Total	.7%	.0%	.7%	.0%	1.3%	3.4%	8.7%	16.1%	30.9%
Other	Count	3	1	3	6	10	10	18	52	103
	% within Field of Study	2.9%	1.0%	2.9%	5.8%	9.7%	9.7%	17.5%	50.5%	100.0%
	% of Total	2.0%	.7%	2.0%	4.0%	6.7%	6.7%	12.1%	34.9%	69.1%

Table 8.

Crosstabs for Item 4

Item 4		4. Various visual elements (e.g. tables, graphics) in my presentations help me organize my thoughts systematically.								Total
		1	2	5	6	7	8	9	10	
English	Count	1	0	0	1	3	6	13	22	46
	% within Field of Study	2.2%	.0%	.0%	2.2%	6.5%	13.0%	28.3%	47.8%	100.0%
	% of Total	.7%	.0%	.0%	.7%	2.0%	4.0%	8.7%	14.8%	30.9%
Other	Count	0	4	5	1	9	15	18	51	103
	% within Field of Study	.0%	3.9%	4.9%	1.0%	8.7%	14.6%	17.5%	49.5%	100.0%
	% of Total	.0%	2.7%	3.4%	.7%	6.0%	10.1%	12.1%	34.2%	69.1%

Table 9.

Crosstabs for Item 5

Item 5		5. Using various elements (e.g. music, visuals) in presentations facilitate comprehension.						Total	
		2	5	6	7	8	9		10
English	Count	1	1	0	1	5	8	30	46
	% within Field of Study	2.2%	2.2%	.0%	2.2%	10.9%	17.4%	65.2%	100.0%
	% of Total	.7%	.7%	.0%	.7%	3.4%	5.4%	20.1%	30.9%
Other	Count	4	1	5	5	7	17	64	103
	% within Field of Study	3.9%	1.0%	4.9%	4.9%	6.8%	16.5%	62.1%	100.0%
	% of Total	2.7%	.7%	3.4%	3.4%	4.7%	11.4%	43.0%	69.1%

Table 11.

Crosstabs for Item 7

Item 7		7. When listening to someone, the body language s/he uses is important for me.						Total	
		2	3	6	7	8	9		10
English	Count	0	0	1	1	2	11	31	46
	% within Field of Study	.0%	.0%	2.2%	2.2%	4.3%	23.9%	67.4%	100.0%
	% of Total	.0%	.0%	.7%	.7%	1.3%	7.4%	20.8%	30.9%
Other	Count	3	1	2	2	10	20	65	103
	% within Field of Study	2.9%	1.0%	1.9%	1.9%	9.7%	19.4%	63.1%	100.0%
	% of Total	2.0%	.7%	1.3%	1.3%	6.7%	13.4%	43.6%	69.1%

Table 12.

Crosstabs for Item 8

Item 8		8. I try to use body language that is suitable to the words I use while speaking.					Total	
		2	6	7	8	9		10
English	Count	0	2	3	4	8	29	46
	% within Field of Study	.0%	4.3%	6.5%	8.7%	17.4%	63.0%	100.0%
	% of Total	.0%	1.3%	2.0%	2.7%	5.4%	19.5%	30.9%
Other	Count	5	2	3	10	23	60	103
	% within Field of Study	4.9%	1.9%	2.9%	9.7%	22.3%	58.3%	100.0%
	% of Total	3.4%	1.3%	2.0%	6.7%	15.4%	40.3%	69.1%

Table 13.

Crosstabs for Item 9

Item 9		9. I prefer interpreting images, sounds, graphics, and texts at the same time.									Total
		1	2	4	5	6	7	8	9	10	
English	Count	2	0	3	1	0	3	12	8	17	46
	% within Field of Study	4.3%	.0%	6.5%	2.2%	.0%	6.5%	26.1%	17.4%	37.0%	100.0%
	% of Total	1.3%	.0%	2.0%	.7%	.0%	2.0%	8.1%	5.4%	11.4%	30.9%
Other	Count	3	3	2	2	4	6	19	17	47	103
	% within Field of Study	2.9%	2.9%	1.9%	1.9%	3.9%	5.8%	18.4%	16.5%	45.6%	100.0%
	% of Total	2.0%	2.0%	1.3%	1.3%	2.7%	4.0%	12.8%	11.4%	31.5%	69.1%

Table 20.

Crosstabs for Item 16

Item 16		16. I think using multiple modes (e.g. written, verbal, visual, auditory) together will distract students.									Total	
		1	2	3	4	5	6	7	8	9		10
English	Count	19	11	10	3	0	0	1	1	0	1	46
	% within Field of Study	41.3%	23.9%	21.7%	6.5%	.0%	.0%	2.2%	2.2%	.0%	2.2%	100.0%
	% of Total	12.8%	7.4%	6.7%	2.0%	.0%	.0%	.7%	.7%	.0%	.7%	30.9%
Other	Count	39	24	15	9	4	1	3	3	1	4	103
	% within Field of Study	37.9%	23.3%	14.6%	8.7%	3.9%	1.0%	2.9%	2.9%	1.0%	3.9%	100.0%
	% of Total	26.2%	16.1%	10.1%	6.0%	2.7%	.7%	2.0%	2.0%	.7%	2.7%	69.1%

Table 21.

Crosstabs for Item 17

Item 17		17. I avoid using my body language while teaching.									Total
		1	2	3	4	6	7	8	9	10	
English	Count	25	13	6	1	0	1	0	0	0	46
	% within Field of Study	54.3%	28.3%	13.0%	2.2%	.0%	2.2%	.0%	.0%	.0%	100.0%
	% of Total	16.8%	8.7%	4.0%	.7%	.0%	.7%	.0%	.0%	.0%	30.9%
Other	Count	63	16	14	3	2	2	1	1	1	103
	% within Field of Study	61.2%	15.5%	13.6%	2.9%	1.9%	1.9%	1.0%	1.0%	1.0%	100.0%
	% of Total	42.3%	10.7%	9.4%	2.0%	1.3%	1.3%	.7%	.7%	.7%	69.1%

Table 22.

Crosstabs for Item 18

Item 18		18. I think the most useful method is direct instruction.								Total
		1	2	3	4	5	6	9	10	
English	Count	26	12	3	4	1	0	0	0	46
	% within Field of Study	56.5%	26.1%	6.5%	8.7%	2.2%	.0%	.0%	.0%	100.0%
	% of Total	17.4%	8.1%	2.0%	2.7%	.7%	.0%	.0%	.0%	30.9%
Other	Count	63	22	9	6	0	1	1	1	103
	% within Field of Study	61.2%	21.4%	8.7%	5.8%	.0%	1.0%	1.0%	1.0%	100.0%
	% of Total	42.3%	14.8%	6.0%	4.0%	.0%	.7%	.7%	.7%	69.1%

Table 24.

Crosstabs for Item 20

Item 20		20. I think presentations with visual, audial, and interactive content are more effective.								Total
		2	3	5	6	7	8	9	10	
English	Count	0	0	0	0	2	1	9	34	46
	% within Field of Study	.0%	.0%	.0%	.0%	4.3%	2.2%	19.6%	73.9%	100.0%
	% of Total	.0%	.0%	.0%	.0%	1.3%	.7%	6.0%	22.8%	30.9%
Other	Count	3	1	1	1	2	11	22	62	103
	% within Field of Study	2.9%	1.0%	1.0%	1.0%	1.9%	10.7%	21.4%	60.2%	100.0%
	% of Total	2.0%	.7%	.7%	.7%	1.3%	7.4%	14.8%	41.6%	69.1%

Table 26.

Crosstabs for Item 22

Item 22		22. I pay attention to the body language of the person I communicate with.								Total	
		2	3	4	5	6	7	8	9		10
English	Count	0	1	0	1	0	2	3	14	25	46
	% within Field of Study	.0%	2.2%	.0%	2.2%	.0%	4.3%	6.5%	30.4%	54.3%	100.0%
	% of Total	.0%	.7%	.0%	.7%	.0%	1.3%	2.0%	9.4%	16.8%	30.9%
Other	Count	3	0	1	0	7	3	10	32	47	103
	% within Field of Study	2.9%	.0%	1.0%	.0%	6.8%	2.9%	9.7%	31.1%	45.6%	100.0%
	% of Total	2.0%	.0%	.7%	.0%	4.7%	2.0%	6.7%	21.5%	31.5%	69.1%

Appendix E: Crosstabs of the Items Excluded from the Questionnaire Results

Table 25.

Crosstabs for Item 21

Item 21		21. I cannot express myself comfortably in contexts where there is only one type of communication (e.g. verbal/written).										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	2	2	7	3	3	0	5	5	7	12	46
	% within Field of Study	4.3%	4.3%	15.2%	6.5%	6.5%	.0%	10.9%	10.9%	15.2%	26.1%	100.0%
	% of Total	1.3%	1.3%	4.7%	2.0%	2.0%	.0%	3.4%	3.4%	4.7%	8.1%	30.9%
Other	Count	14	9	6	6	12	9	7	16	10	14	103
	% within Field of Study	13.6%	8.7%	5.8%	5.8%	11.7%	8.7%	6.8%	15.5%	9.7%	13.6%	100.0%
	% of Total	9.4%	6.0%	4.0%	4.0%	8.1%	6.0%	4.7%	10.7%	6.7%	9.4%	69.1%

Table 28.

Crosstabs for Item 24

Item 24		24. I prefer to interpret visual, auditory, verbal, and written content separately.										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	6	3	6	5	12	3	2	5	1	3	46
	% within Field of Study	13.0%	6.5%	13.0%	10.9%	26.1%	6.5%	4.3%	10.9%	2.2%	6.5%	100.0%
	% of Total	4.0%	2.0%	4.0%	3.4%	8.1%	2.0%	1.3%	3.4%	.7%	2.0%	30.9%
Other	Count	16	9	9	13	13	11	11	6	6	9	103
	% within Field of Study	15.5%	8.7%	8.7%	12.6%	12.6%	10.7%	10.7%	5.8%	5.8%	8.7%	100.0%
	% of Total	10.7%	6.0%	6.0%	8.7%	8.7%	7.4%	7.4%	4.0%	4.0%	6.0%	69.1%

Appendix F: Crosstabs of Observation Results

Table 31.

Crosstabs for Item 1

Item 1		1.Used voice and intonation									Total
		1	2	3	4	5	7	8	9	10	
English	Count	4	14	11	4	2	2	1	1	1	40
	% within Field	10.0%	35.0%	27.5%	10.0%	5.0%	5.0%	2.5%	2.5%	2.5%	100.0%
	% of Total	5.6%	19.4%	15.3%	5.6%	2.8%	2.8%	1.4%	1.4%	1.4%	55.6%
Other	Count	5	2	16	7	1	1	0	0	0	32
	% within Field	15.6%	6.3%	50.0%	21.9%	3.1%	3.1%	.0%	.0%	.0%	100.0%
	% of Total	6.9%	2.8%	22.2%	9.7%	1.4%	1.4%	.0%	.0%	.0%	44.4%

Table 33.

Crosstabs for Item 3

Item 3		3.Used other verbal resources			Total
		1	4	8	
English	Count	40	0	0	40
	% within Field	100.0%	.0%	.0%	100.0%
	% of Total	55.6%	.0%	.0%	55.6%
Other	Count	30	1	1	32
	% within Field	93.8%	3.1%	3.1%	100.0%
	% of Total	41.7%	1.4%	1.4%	44.4%

Table 34.

Crosstabs for Item 4

Item 4		4.Used diagrams, tables or pictures										Total
		1	2	3	4	5	6	7	8	9	10	
English	Count	5	2	6	5	6	10	2	2	1	1	40
	% within Field	12.5%	5.0%	15.0%	12.5%	15.0%	25.0%	5.0%	5.0%	2.5%	2.5%	100.0%
	% of Total	6.9%	2.8%	8.3%	6.9%	8.3%	13.9%	2.8%	2.8%	1.4%	1.4%	55.6%
Other	Count	9	0	2	2	3	2	8	4	1	1	32
	% within Field	28.1%	.0%	6.3%	6.3%	9.4%	6.3%	25.0%	12.5%	3.1%	3.1%	100.0%
	% of Total	12.5%	.0%	2.8%	2.8%	4.2%	2.8%	11.1%	5.6%	1.4%	1.4%	44.4%

Table 35.

Crosstabs for Item 5

Item 5		5.Used animations or video recordings								Total
		1	2	3	4	5	6	7	8	
English	Count	29	0	2	2	4	0	1	2	40
	% within Field	72.5%	.0%	5.0%	5.0%	10.0%	.0%	2.5%	5.0%	100.0%
	% of Total	40.3%	.0%	2.8%	2.8%	5.6%	.0%	1.4%	2.8%	55.6%
Other	Count	24	1	0	0	2	1	0	4	32
	% within Field	75.0%	3.1%	.0%	.0%	6.3%	3.1%	.0%	12.5%	100.0%
	% of Total	33.3%	1.4%	.0%	.0%	2.8%	1.4%	.0%	5.6%	44.4%

Table 36.

Crosstabs for Item 6

Item 6		6.Used other visual resources				Total
		1	3	8	9	
English	Count	38	2	0	0	40
	% within Field	95.0%	5.0%	.0%	.0%	100.0%
	% of Total	52.8%	2.8%	.0%	.0%	55.6%
Other	Count	30	0	1	1	32
	% within Field	93.8%	.0%	3.1%	3.1%	100.0%
	% of Total	41.7%	.0%	1.4%	1.4%	44.4%

Table 37.

Crosstabs for Item 7

Item 7		7.Used music along with the lecture						Total
		1	2	3	4	5	6	
English	Count	29	2	3	3	2	1	40
	% within Field	72.5%	5.0%	7.5%	7.5%	5.0%	2.5%	100.0%
	% of Total	40.3%	2.8%	4.2%	4.2%	2.8%	1.4%	55.6%
Other	Count	29	0	1	0	1	1	32
	% within Field	90.6%	.0%	3.1%	.0%	3.1%	3.1%	100.0%
	% of Total	40.3%	.0%	1.4%	.0%	1.4%	1.4%	44.4%

Table 38.

Crosstabs for Item 8

Item 8		8.Used audio recordings								Total	
		1	2	3	4	5	6	7	9		10
English	Count	25	1	1	1	5	0	5	1	1	40
	% within Field	62.5%	2.5%	2.5%	2.5%	12.5%	.0%	12.5%	2.5%	2.5%	100.0%
	% of Total	34.7%	1.4%	1.4%	1.4%	6.9%	.0%	6.9%	1.4%	1.4%	55.6%
Other	Count	29	0	0	0	2	1	0	0	0	32
	% within Field	90.6%	.0%	.0%	.0%	6.3%	3.1%	.0%	.0%	.0%	100.0%
	% of Total	40.3%	.0%	.0%	.0%	2.8%	1.4%	.0%	.0%	.0%	44.4%

Table 39.

Crosstabs for Item 9

Item 9		9 Used other auditory resources		
		1	3	Total
English	Count	39	1	40
	% within Field	97.5%	2.5%	100.0%
	% of Total	54.2%	1.4%	55.6%
Other	Count	32	0	32
	% within Field	100.0%	.0%	100.0%
	% of Total	44.4%	.0%	44.4%

Table 41.

Crosstabs for Item 11

Item 11		11.Used technological tools (i.e. apps)							Total
		1	2	3	5	7	8	9	
English	Count	31	1	1	4	1	1	1	40
	% within Field	77,5%	2,5%	2,5%	10,0%	2,5%	2,5%	2,5%	100,0%
	% of Total	43,1%	1,4%	1,4%	5,6%	1,4%	1,4%	1,4%	55,6%
Other	Count	32	0	0	0	0	0	0	32
	% within Field	100,0%	,0%	,0%	,0%	,0%	,0%	,0%	100,0%
	% of Total	44,4%	,0%	,0%	,0%	,0%	,0%	,0%	44,4%

Table 42.

Crosstabs for Item 12

Item 12		12.Used other technological resources								Total	
		1	3	4	5	6	7	8	9		10
English	Count	18	3	9	3	1	4	2	0	0	40
	% within Field	45.0%	7.5%	22.5%	7.5%	2.5%	10.0%	5.0%	.0%	.0%	100.0%
	% of Total	25.0%	4.2%	12.5%	4.2%	1.4%	5.6%	2.8%	.0%	.0%	55.6%
Other	Count	10	0	2	4	4	6	4	1	1	32
	% within Field	31.3%	.0%	6.3%	12.5%	12.5%	18.8%	12.5%	3.1%	3.1%	100.0%
	% of Total	13.9%	.0%	2.8%	5.6%	5.6%	8.3%	5.6%	1.4%	1.4%	44.4%

Table 43.

Crosstabs for Item 13

Item 13		13.Used body language								Total
		1	2	3	4	5	6	8	9	
English	Count	28	4	1	1	0	0	3	3	40
	% within Field	70.0%	10.0%	2.5%	2.5%	.0%	.0%	7.5%	7.5%	100.0%
	% of Total	38.9%	5.6%	1.4%	1.4%	.0%	.0%	4.2%	4.2%	55.6%
Other	Count	21	2	1	0	3	3	0	2	32
	% within Field	65.6%	6.3%	3.1%	.0%	9.4%	9.4%	.0%	6.3%	100.0%
	% of Total	29.2%	2.8%	1.4%	.0%	4.2%	4.2%	.0%	2.8%	44.4%

Table 45.

Crosstabs for Item 15

Item 15		15. Used other bodily resources		
		1	9	Total
English	Count	40	0	40
	% within Field	100.0%	.0%	100.0%
	% of Total	55.6%	.0%	55.6%
Other	Count	31	1	32
	% within Field	96.9%	3.1%	100.0%
	% of Total	43.1%	1.4%	44.4%

Table 46.

Crosstabs for Item 16

Item 16		16.Used print/written texts							Total
		1	3	4	5	6	7	8	
English	Count	21	4	4	4	2	3	2	40
	% within Field	52.5%	10.0%	10.0%	10.0%	5.0%	7.5%	5.0%	100.0%
	% of Total	29.2%	5.6%	5.6%	5.6%	2.8%	4.2%	2.8%	55.6%
Other	Count	25	0	1	2	0	4	0	32
	% within Field	78.1%	.0%	3.1%	6.3%	.0%	12.5%	.0%	100.0%
	% of Total	34.7%	.0%	1.4%	2.8%	.0%	5.6%	.0%	44.4%

Table 47.

Crosstabs for Item 17

Item 17		17.Used coursebook								Total
		1	3	4	5	6	7	8	9	
English	Count	24	2	1	2	6	2	3	0	40
	% within Field	60.0%	5.0%	2.5%	5.0%	15.0%	5.0%	7.5%	.0%	100.0%
	% of Total	33.3%	2.8%	1.4%	2.8%	8.3%	2.8%	4.2%	.0%	55.6%
Other	Count	21	0	1	0	2	4	2	2	32
	% within Field	65.6%	.0%	3.1%	.0%	6.3%	12.5%	6.3%	6.3%	100.0%
	% of Total	29.2%	.0%	1.4%	.0%	2.8%	5.6%	2.8%	2.8%	44.4%

Table 48.

Crosstabs for Item 18

Item 18		18.Other print/textual/written resources								Total
		1	2	3	4	5	6	7	8	
English	Count	30	2	1	2	2	1	1	1	40
	% within Field	75.0%	5.0%	2.5%	5.0%	5.0%	2.5%	2.5%	2.5%	100.0%
	% of Total	41.7%	2.8%	1.4%	2.8%	2.8%	1.4%	1.4%	1.4%	55.6%
Other	Count	29	0	0	0	1	1	1	0	32
	% within Field	90.6%	.0%	.0%	.0%	3.1%	3.1%	3.1%	.0%	100.0%
	% of Total	40.3%	.0%	.0%	.0%	1.4%	1.4%	1.4%	.0%	44.4%

CURRICULUM VITAE

Work Experience:

2012-2014 Erzurum Tekman Çevirme Secondary School (English Teacher)

2014-2016 Erzurum Tekman Çevirme Secondary School (School Administrator)

2016-2018 Bolu Gerede Anatolian High School (English Teacher)

2018-Present Bolu Merkez Atatürk Secondary School (School Administrator)

Education:

High School: Foreign Language Intensive Kayseri Şeker High School

Bachelor's Degree: Abant İzzet Baysal University English Language Teaching (2006-2011)

Master's Degree: Kocaeli University Institute of Social Sciences English Language Teaching Program (2018-2021)

Publications:

2021 An Evaluation of EFL Coursebooks Provided by the Ministry of National Education Based on Teachers' Opinions (Şahin, H.İ.)

Certifications:

2019 Gazi University GELTUS Conference (Paper Presentation)

2020 Çanakkale 18 Mart University 11th International ELT Research Conference (Paper Presentation)