Journal of Learning and Teaching in Digital Age, 2023, **9**(2), 43-54
https://dergipark.org.tr/en/pub/joltida
ISSN: 2458-8350 (online)

Research Paper

Multimodality in Distance Education during COVID-19: Teachers' Perspectives and Practices*

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ARTICLE INFO

Received: 28 July 2023
Revised: 27 February 2024
Accepted: 27 February 2024

Keywords:
Multimodality
Distance education
COVID-19
Teacher training
Social semiotics

doi: 10.53850/joltida.1334294

ABSTRACT

With the outbreak of the COVID-19 pandemic, governments around the world were forced to take emergency measures in every aspect of life including education. Instead of the prevalent face-to-face mode of teaching, institutions turned to online teaching one by one. This brought many issues along with it. Because of distance education, it became quite challenging for teachers to maintain the multimodal nature of communication. This research aims to examine in-service teachers' perceptions and actual practices regarding multimodal instruction in online lessons during the COVID-19 pandemic from a descriptive point of view. The research followed an explanatory sequential mixed-methods design. Firstly, to examine the beliefs and preferences of teachers, a 24-item questionnaire (henceforth Multimodal Teaching Questionnaire) that was adapted from a previously developed questionnaire by Bulut et al. (2015) was used. Secondly, 72 hours of distance lessons from 36 teachers were observed via Zoom online conferencing tool. The results showed a discrepancy between the teachers' statements and their actual practices regarding multimodality. While most of them reported extensive use of multimodality in their instruction, observations showed that in the majority of their lessons, only one or two modes were used.

INTRODUCTION

Throughout history, face-to-face education has been the dominant mode of instruction. Although various types of models have been proposed for teaching, such as e-learning, blended/hybrid learning (Bonk & Graham, 2006), or flipped learning (Bergmann & Sams, 2012), the interest in those was only just emerging among professionals before the pandemic (Masalimova et al., 2022). However, with the sudden emergence of COVID-19, a new term, distance education, which was born at the University of London (University of London, 2023) nearly two centuries ago, started to echo throughout educational circles, and immediately became popular. The pandemic, and switching to distance education, brought about a lot of challenges. One of the biggest issues that both the students and the teachers faced during this period was ensuring meaningful learning in the classrooms (Ally et al. 2022). However, especially at the beginning of the lockdown, this goal could not be achieved to a satisfactory extent (Schuir et al. 2022). When the history of education was examined, it can be seen that for meaningful learning a lot of methods and techniques have been proposed to the present day. However, as noted by Kumaravadivelu (1994), the idea of separate methods is no longer a major concern in education. Instead, it might be a better way for the teachers to modify their instruction according to the unique requirements of each of their lessons. As Nunan (1991) emphasized there will not probably be a single method for all, and the tasks and activities that keep up with the dynamics of unique classroom environments should be the focus of teaching.

As a response to this challenge in instruction, multimodality as a term first started to appear in various articles by different researchers towards the end of the 1990s (O'Toole, 1994, 2010; O'Halloran, 1999; Goodwin, 2000; Kress & van Leeuwen, 1996, 2001, 2006; Baldry & Thibault, 2006; Bateman, 2008; Lemke, 2009). Kress (2014) described modality, mode, or semiotic resource as a set of socially and culturally shaped resources for making meaning. Therefore, multimodality is the utilization of multiple modes in the process of meaning-making (Jewitt et al., 2016). It should be remembered that in face-to-face interaction, language is already multimodal by nature (Holler & Levinson, 2019; Perniss, 2018). When we communicate with people around us, we do not only use our voice or intonation, but we make use of our gestures, facial expressions, and other bodily resources. Furthermore, in today's highly technological world, we also use audio, video clips, web tools, and many other vehicles to convey our message. Bateman et al. (2017) stated, "If you are watching a TV news program, where a presenter discusses some events backed up by textual overlays and videos or reading a book with diagrams, text, photographs, and graphs, then you are interacting with a multimodal medium" (p. 8).

The subject is also worth the attention in Turkish context because The Turkish Ministry of National Education (i.e., MoNE) places a strong emphasis on meaningful learning, real-life communication, and communicative competence in a wider sense in the most

*This article was produced from first author's MA thesis.

recent version of the English Language Teaching Curriculum (The Board of Education and Discipline of Türkiye, 2018, p.4). As mentioned above, in real life, we are already surrounded by multimodal contexts, and evidence has shown that messages from multiple modalities can lead to the facilitation of understanding (i.e. participants respond faster to multimodal stimuli than to unimodal ones) (Drijvers & Hollers, 2022). Since the curriculum of MoNE puts such a great emphasis on real-life communication and meaningful learning, and since real-life is inevitably multimodal and multimodality fosters meaningful learning, it would not be unfair to state that multimodal instruction is an approach that Turkish students as well as teachers should adopt to achieve meaningful learning goals as suggested in the MoNE's curriculum. Being surrounded by such multimodal environments, holding on to the traditional ways of instruction, and using only one or two modes in the lessons could contradict real-life contexts. As Sankey (2006) pointed out, learners feel more comfortable if the environment reflects their learning styles. It is important to use a variety of methods to respond to a variety of learning styles since according to Gilakjani et al. (2011) every learner has distinct learning modalities such as visual, audial, written, or kinesthetic and a majority of them are multimodal (i.e. they use a mix of these modalities). On the other hand, when the actual practices of teachers are examined, it does not go unnoticed that even in the 21st century, there has been a tendency towards unimodal instruction. Teachers mostly prefer only one or two modes in their lessons (i.e. verbal or textual modes). As Kress and van Leeuwen (2001) pointed out, "There has been, in Western culture, a distinct preference for monomodality" (p.9). These facts gain even more importance in a distance education context. Without an actual classroom context and the presence of people in the same room, it becomes quite challenging both for the teachers and students to maintain the multimodal aspects of communication and meaning-making through a computer screen.

In light of this information, this research aims to investigate Turkish teachers' use of multimodality in their distance lessons during the COVID-19 pandemic. To examine teachers' beliefs and practices regarding multimodality, both quantitative and qualitative methods were used. The current research is significant in that studies on the subject in the Turkish context are quite scarce and most of the existing research focuses primarily on pre-service teachers and their multimodal literacy levels. There is a significant gap regarding the actual multimodality practices of in-service teachers.

LITERATURE REVIEW

Ever since its first emergence in the 1990s, multimodality has been defined in various ways. Some scholars on the subject suggested multimodality as a theory of education while others described it as a practical application instead of a theory. Jewitt (2009) commented that multimodality can be described as a theory, an approach, or a methodological application. Apart from its definition, there has been a growing body of literature examining multimodal instruction from various perspectives.

Multimodality Studies in International Context

Gilakjani et al. (2011) investigated the effects of multimodality on teaching and learning and found that multimodal instruction is significant in highlighting the importance of using multiple modes in real-life contexts. For students to construct meaning, each modality is a valuable resource. Also, they stated a significant need for studies that examine the effects of various modes such as auditory, visual, and gestural modes on learning. Cárcamo et al. (2016), on the other hand, examined multimodality from a vocabulary instruction point of view and found that multimodal instruction significantly enhanced students' vocabulary acquisition. They concluded that investigating multimodality in different contexts with participants that have various demographics would be invaluable for the literature.

As for the perceptions of teachers and teacher candidates, Ajayi (2010), investigated 48 pre-service teachers studying at a California state university in terms of their knowledge and perceptions of their teacher training programs. They were asked to evaluate their programs from a multimodality/multiliteracy point of view. They found that prospective teachers had a high awareness of the positive effects of the new technologies on literacy learning and instruction. However, the participants reported concerns regarding the sufficiency of their teacher preparation programs in teaching multimodal literacy. In addition, in Yi and Choi's (2015) study, 25 K-12 teachers working in the USA were examined for their opinions regarding multimodality use in their instruction. 92% of the participants (n=23) commented positively about the potential of multimodal practices. However, they also stated their concerns about the drawbacks such as the planning and implementation time, and the discrepancy between multimodality and paper-based assessment. They concluded by stating a critical gap between the multimodal theory and actual instruction. Furthermore, teachers' perceptions in terms of multimodal instruction were investigated in another study by Ryu and Boggs (2016). Five middle and high school teachers in South Korea were examined in the study and according to the results, teachers found multimodality effective in terms of students' writing motivation. They also stated their interest in using technology and multimodal texts because of the ineffectiveness of traditional methods in promoting learner engagement. Consistent with the previous research on the subject (e.g. Thompson, 2008; Vasudevan et al., 2010), they highlighted that students are already involved with multimodal resources in their lives, which creates an inconsistency between real life and traditional classrooms where unimodal instruction is the dominant mode of teaching. In addition, teachers also commented on the facilitative effects of multimodality on students' active participation: the more cooperative and multimodal the activities are, the more willing and excited the students are about participating in the lessons. Finally, Tan and Matsuda (2020), investigated teachers' perceptions and preferences in terms of multimodality. Nine graduate teaching assistants working at a USA state university participated in the study. They found that the teachers had a positive view towards multimodality and they use multimodal texts to promote their students' awareness, cultural sensitivity, critical thinking ability, and understanding of subject-matter knowledge. The participant teachers also had a high awareness of the potential of utilizing multimodal texts in writing classrooms.

Multimodality Studies in the Turkish Context

Multimodality has also been investigated in the Turkish context. Ekşi and Yılmaz Yakışık (2015), for example, examined pre-service English teachers' multimodal literacy levels and found that prospective teachers have high multimodal literacy levels. They also found a connection between the time they spend on the internet and their multimodal literacy levels. According to the results, the more time the students spend online, the higher their multimodal literacy levels get. They recommended replica studies in similar contexts and further investigations on in-service teachers with different demographics such as experience, age, and sex. Additionally, in Ulu and Tuncay's (2017) study, prospective teachers' multimodal literacy levels were investigated according to different variables such as gender, internet use, and the educational background of the parents. They found that most prospective teachers have high multimodal literacy levels, while there is a significant difference between female and male pre-service teachers in favor of female teachers. The participants also reported facilitative effects of multimodality on instruction and active participation. They stated a strong preference for multimodal instruction over traditional methods since they already engage in multimodal resources in their daily lives. The researchers in this study suggested that future studies should examine multimodality in terms of different subjects of study. Ulu et al. (2017) also examined the prospective teachers in terms of their multimodal literacy levels and their effects on self-efficacy in reading. The results revealed a strong connection between multimodality and self-efficacy perceptions. Akayoglu et al. (2020) also examined pre-service EFL teachers' practices of digital literacy. He found that teacher candidates had a high awareness of digital tools. The participants believed that they were capable of using these tools for their own personal, academic, and professional objectives. Contrary to these studies, in his action research, Tüzel (2013) investigated pre-service Turkish language teachers in terms of their views on multimodal literacy teaching and he found that the pre-service teachers did not have an awareness of the multimodal text structure. 61 teacher candidates studying at Çanakkale 18 Mart University Turkish Language Education Department took part in the research. 47 of the participants stated that they did not hear the term multimodality before while 11 of them reported that they did not remember whether they had heard it or not. Nearly 65% of the participants responded positively to the use of multimodality in Turkish lessons while others reported that multimodal texts should not be integrated into Turkish lessons. Almost all of the participants, on the other hand, commented that the training they got at the university on multimodal literacy was not sufficient.

Multimodality Studies during COVID-19

Research regarding multimodality was also carried out during the pandemic. Ally et al. (2022), for example, investigated the preferences of undergraduate students from a descriptive point of view. According to the results of this study, the majority of the participants reported that they preferred multimodal instruction over unimodal education, and the most preferred mode was the kinaesthetic mode. Students stated that multimodality fostered their engagement and addressed the various learning styles in the classroom. It was also highlighted that the multimodal resources that teachers provided and the availability of those resources for asynchronous use were favored significantly by students. In another study, Schuir et al. (2022) suggested multimodal conversational agents to provide support in distance education. They provided three design principles and evaluated those designs with 11 teachers. It was found that their multimodal applications were useful in supporting students and aiding teachers during distance learning. They concluded by recommending that future research should focus more on the practical aspects of multimodality. Finally, in their research, Sari et al. (2022) examined the effectiveness of multimodality during the COVID-19 pandemic. 47 students participated in the research and their opinions were asked regarding multimodal pedagogy. It was found that multimodality might enhance learning outcomes more effectively than traditional methods. Therefore, it was stated that multimodality in distance learning could develop students' overall proficiency and foster meaningful learning.

In summary, while the majority of the studies in the literature reported that multimodality might be quite beneficial for fostering motivation, engagement, and meaningful learning in face-to-face and distance education, most of these studies are based on pre-service teachers and their opinions regarding multimodality/multimodal literacy, or students' perspectives on multimodality. The research on in-service teachers in the literature, on the other hand, is mostly based on the self-reports from the teachers. It can be concluded that there is a significant gap in the field in terms of the actual practices of in-service teachers, especially in the Turkish context. Thus, motivated by the gap in the literature and the suggestions from the previous studies, the objective of the present study is to investigate the actual multimodality practices of in-service teachers and highlight the importance of multimodal instruction. The research is unique in that the teachers were observed in action, and with the use of real-time data, a comprehensive account of their practices in terms of multimodal instruction was obtained.

An indirect objective of this research is to provide a brief picture of the current situation in Turkish state schools regarding multimodal instruction. By the pioneering of this research, it is anticipated to develop awareness in the field to encourage the MoNE to modify and enhance the curriculum along with the educational practices across the country. Therefore, the research questions are:

1. What are the teachers' beliefs, preferences, and attitudes regarding multimodality?
2. What are their actual practices regarding multimodality?
3. Are there any significant differences between the teachers' beliefs, preferences, attitudes, and actual practices regarding multimodality?

METHOD

The present research was carried out during the 2020-2021 educational year in Bolu/Türkiye. Participants of the study consisted of 150 in-service teachers of various school subjects, who were actively working at state schools in Bolu. An explanatory sequential mixed-methods design was followed in the research.

Firstly, for the quantitative part of the investigation, a 24-item Multimodal Teaching Questionnaire that was adapted based on a previously developed questionnaire by Bulut et al. (2015) was used. The questionnaire was administered to 150 in-service teachers who were chosen based on convenience sampling (Friedman, 2012). Since the participants consisted of both English teachers and content teachers, a multilingual approach was adopted in the research, that is, both English and Turkish were used in the investigations. A multilingual approach is especially facilitative in terms of building rapport with the participants, using multiple sources of data, and opening a broader mindset for the researcher to use linguistic resources (Andrews et al., 2020).

Secondly, in the qualitative part of the research, lesson observations were carried out to examine the actual practices of the teachers. 36 volunteers were invited among the participants of the questionnaire for the observations. To ensure reliability, each teacher was observed at two different distance lessons with two separate classes. Hence, a total of 72 hours of lessons were observed and recorded with the permission of the teachers for further investigation and analysis.

Participants

The participants of the research consisted of primary school (n=37), secondary school (n=78), and high school teachers (n=35). 67 out of 150 teachers had 15+ years of experience in teaching while 55 of them had 10-15 years of experience, 26 of them had 5-10 years of experience, and 2 of them had 0-5 years of teaching experience. English teachers in the study (n=46) formed 30.7% of the total population, while content teachers (n=104) formed 69.3% of the population. Table 1 presents the descriptives of the research.

Table 1. Descriptives of the Participants (n=150)

		N	%
Level	Primary School (ages 7-10)	37	24.7
	Secondary School (ages 10-14)	78	52.0
	High School (ages 14-18)	35	23.3
Teaching Experience	0-5 years	2	1.3
	5-10 years	26	17.3
	10-15 years	55	36.7
	15+ years	67	44.7
Subject of Study	English	46	30.7
	Mathematics	9	6.0
	Social Sciences	6	4.0
	Science	12	8.0
	Turkish	11	7.3
	Religion	7	4.7
	Other	59	39.3

Data Collection and Analysis

As mentioned above, current research followed an explanatory sequential mixed-methods design. Firstly, a quantitative investigation was carried out, and after that, qualitative tools were put to work to further investigate and elaborate on the results of the quantitative research. In the quantitative part, we administered the aforementioned Multimodal Teaching Questionnaire. The original version of the questionnaire by Bulut et al. (2015) was a 17-item 5-point Likert scale questionnaire and was written in the Turkish language. It was intended to measure prospective teachers' multimodal literacy levels. On the other hand, the Multimodal Teaching Questionnaire was organized as a 24-item 10-point Likert scale questionnaire and it was intended to collect the teachers' perspectives on multimodality. Participants rated their responses on a scale of 10 points (i.e. 1: totally disagree, 10: totally agree). As Dörnyei and Taguchi (2010) clarified, there are studies where more than five response scales were used and there are no strict standards for this number.

During the adaptation process, we primarily adhered to the principles of Dörnyei and Taguchi (2010). First of all, the tool we used in the investigation was borrowed from an already administered 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, if possible, we transformed the items with first-person singular statements into neutral statements by using the passive sentence structure. During the writing of the items, we consulted specialists to get their opinions about the items and make modifications accordingly. In terms of complexity, when possible, we used shorter items instead of longer ones, and positively structured items instead of negatively structured ones to avoid visual load.

However, since "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), we tried to incorporate a balanced mixture of both positively and negatively structured items. It was administered as an online survey since "they are becoming the predominant mode of conducting surveys, superseding paper-based surveys" (Cohen et al., 2018, p. 361). A total number of 150 teachers (i.e. 46 English, and 104 content teachers) participated in the survey. The results were analyzed using SPSS 21 from a descriptive point of view.

On the other hand, in the qualitative part, 36 volunteer teachers were invited for the observations. For the reliability of the data, each teacher was observed in two separate lessons with two different groups synchronously and also these lessons were recorded via Zoom software with the teachers' permission for further analysis later. In total, 72 hours of lessons were observed. During the observation process, field notes were taken and an observation checklist (i.e. Multimodal Classroom Observation Checklist or MCOC) that was developed by the author based on the Multimodal Teaching Questionnaire was used. The data were analyzed following a thematic analysis approach. Based on the literature, expert opinion, and professional insight, six modes/themes (i.e. linguistic, textual, visual, audial, technological, and gestural) were defined preliminarily to categorize the data from the lessons, and each theme had 3 items in it. Thus, a total of 18 items were obtained in the MCOC. After the initial synchronous observation, the lesson recordings were examined again in detail by the researcher, and the field notes were also taken. Initially, 42 codes were created, then those codes were moved to the relevant pre-defined item under the pre-defined theme in the checklist. For example, an initial code was created for "using .pdf files" in the lessons. Then, that code was moved to the "other technological tools" section under the theme of "technological mode". The checklist provided the number of times that the observed teacher used certain elements (e.g. visuals, body language, audio) in the lesson.

FINDINGS

Teachers' beliefs, attitudes, and preferences of multimodality

This part of the research examines the results of the questionnaire from a descriptive point of view. According to the mean values of the items in Table 2, most of the teachers stated opinions in favor of multimodal instruction. They preferred multimodal contexts over unimodal ones, and they commented on the benefits of using various elements in the lessons to facilitate motivation and comprehension in students. On the other hand, the items favoring unimodal contexts yielded quite low mean values. Teachers stated negative opinions regarding direct verbal instruction, lack of visuals, audio, technological tools, or even body language in teaching.

Table 2. Mean Values from the Questionnaire

Items	Mean
1. I prefer preparing interactive presentations using music, visuals, and/or animations in my lessons	8,5
2. I prefer using visuals such as graphics, tables, pictures, or photos in my texts	8,65
3. The contexts where texts, images, and sounds are together, help me express myself more comfortably.	8,79
4. Various visual elements (e.g. tables, graphics) in my presentations help me organize my thoughts systematically.	8,77
5. Using various elements (e.g. music, visuals) in presentations facilitates comprehension.	9,08
6. . I think using the content from different media channels (e.g. newspapers, television, social media) in the lessons can be beneficial.	8,97
7. When listening to someone, the body language s/he uses is important for me.	9,28
8. I try to use body language that is suitable to the words I use while speaking.	9,11
9. I prefer interpreting images, sounds, graphics, and texts at the same time.	8,36
10. Communication in which text, sound, and visual elements are used together is boring	2,7
11. Electronic environments in which visual, audial, and written elements are used together are distracting.	2,6
12. Using visual, auditory, and written elements together can lead to mental laziness.	2,93
13. I believe only in the power of verbal expression when sharing my opinions.	2,49
14. In my lessons, I use visual elements in addition to verbal lectures.	9,13
15. I prefer using technological tools (e.g. Edmodo, Google Classroom, Kahoot) to help students understand the subject better.	7,75
16. I think using multiple modes (e.g. written, verbal, visual, auditory) together will distract students.	2,66
17. I avoid using my body language while teaching.	1,89
18. I think the most useful method is direct verbal instruction.	1,77
19. I think that video-supported teaching can have a positive effect on learning.	9,11
20. I think presentations with visual, audial, and interactive content are more effective.	9,28
21. I cannot express myself comfortably in contexts where there is only one type of communication (e.g. verbal/written).	6,09
22. I pay attention to the body language of the person I communicate with.	8,95

23. Contexts, where multiple modes (written. oral. visual. auditory) are used, are confusing.	2,52
24. I prefer interpreting visual, auditory, verbal, and written content separately.	4,93

To avoid visual load, details for only the items with the highest (i.e. item 20) and the lowest (i.e. item 18) mean values were presented in the following part. Item 20, "I think, presentations with visual, auditory, and interactive content are more effective than those without", yielded a mean value of 9,28 out of 10. On the other hand, item 18, "I think the most effective method is direct verbal instruction", yielded 1,77 points out of 10.

Table 3. Descriptives for item 20

Item 20	Points	Frequency	Percent
I think presentations with visual, auditory, and interactive content are more effective than those without	2	3	2
	3	1	0,7
	5	1	0,7
	6	1	0,7
	7	4	2,7
	8	12	8,1
	9	31	20,8
	10	96	64,4
	Total	149	100

According to Table 3, for item 20, 96 teachers marked totally agree (i.e. 10th point) on the scale, followed by 31 of them marking quite agree (i.e. 9th point), and 12 of them somewhat agree (8th point), which constitutes nearly 94% of the total population. It can be inferred that a majority of the teachers think that presentations with multimodal content are quite effective in teaching. In the next table, descriptives regarding the item with the lowest mean values were presented.

Table 4. Descriptives for item 18

Item 18		Frequency	Percent	Valid Percent	Cumulative Percent
I think the most effective method is direct verbal instruction	1	89	59,7	59,7	59,7
	2	34	22,8	22,8	82,6
	3	12	8,1	8,1	90,6
	4	10	6,7	6,7	97,3
	5	1	0,7	0,7	98
	6	1	0,7	0,7	98,7
	9	1	0,7	0,7	99,3
	10	1	0,7	0,7	100
	Total	149	100	100	

As seen in Table 4, for item 18, 89 teachers marked totally disagree (i.e. 1st point) on the scale, followed by 34 of them marking quite disagree (i.e. 2nd point), and 12 of them somewhat disagree (i.e. 8th point), which constitutes nearly 90% of the total population. It can be concluded that a majority of the teachers think that the direct verbal method is not an effective method of teaching. To sum up, teachers stated a strong preference for multimodal instruction, and they commented that multimodality has a positive effect on learning.

Teachers' Actual Practices of Multimodality

In the following section, results from the observations were presented. Table 5 presents the mean values from the checklist. As seen in the table, the item with the highest mean value is the 2nd item, using verbal lectures. In addition, items about using various multimodal elements such as visuals, audio, technological tools, and bodily resources yielded quite low mean values.

Table 5. Mean Values from the Observations

Items	N	Mean
Verbal Mode/Theme		
1. Used voice and intonation	72	3,18
2. Used verbal lectures	72	6,96
3. Other verbal resources	72	1,14
Visual Mode/Theme		
4. Used diagrams, tables, or pictures	72	4,76
5. Used animations or video recordings	72	2,22
6. Other visual resources	72	1,26
Auditory Mode/Theme		
7. Used music along with the lecture	72	1,57
8. Used audio recordings	72	2,19
9. Other auditory resources	72	1,03
Technological Mode/Theme		
10. Used websites, internet	72	3,15
11. Used technological tools (i.e. apps)	72	1,56
12. Other technological resources	72	3,93
Bodily Mode/Theme		
13. Used body language	72	2,4
14. Used gestures and facial expression	72	2,38
15. Other bodily resources	72	1,11
Written Mode/Theme		
16. Used written texts	72	2,57
17. Used coursebook	72	3,01
18. Other print resources	72	1,71

In the checklist, items regarding other resources (i.e. 3rd, 6th, 9th, 12th, 15th, and 18th) represent the elements teachers used but that did not fit in under the first two items before it. For example, some teachers used PowerPoint presentations, the interactive version of the coursebook, or .pdf files in their lessons. Those elements were categorized under "other technological resources" since they can neither be categorized under "websites, internet" nor "apps". On the other hand, it should be noted that most of the multimodal elements used by the teachers were not intentionally brought in to create a multimodal context. For example, diagrams, tables, or pictures used in the lessons were mostly the visuals in the coursebook. Teachers encountered those visuals during the flow of the lessons and made use of them. In the following part, details regarding the items with the highest and the lowest mean values were presented.

Table 6. Descriptives for Item 2

Item 2		Frequency	Percent	Valid Percent	Cumulative Percent
Used verbal lectures	1	2	2,8	2,8	2,8
	3	1	1,4	1,4	4,2
	4	2	2,8	2,8	6,9
	5	8	11,1	11,1	18,1
	6	10	13,9	13,9	31,9
	7	16	22,2	22,2	54,2
	8	24	33,3	33,3	87,5
	9	6	8,3	8,3	95,8
	10	3	4,2	4,2	100
	Total	72	100	100	

In Table 6, the first column (i.e. the column above "Total") can be interpreted as the percentage of the lesson that the verbal mode was used. For example, 3 teachers used verbal mode the whole time, 6 teachers used it in 90% of the lesson, and 24 teachers in 80% of the lesson. The least used mode in the lessons, on the other hand, is the auditory mode. When the mean values are examined,

music, audio recordings, and other auditory resources yielded mean values of 1,57, 2,19, and 1,03, respectively. It should be noted that, here, the first point (i.e. 1) on the scale represents zero or near zero value, that is, 2 teachers rarely, or never used verbal mode.

Table 7. Descriptives for Item 2

Item 9		Frequency	Percent	Valid Percent	Cumulative Percent
Other auditory resources	1	71	98,6	98,6	98,6
	3	1	1,4	1,4	100
	Total	72	100	100	

Table 7 presents the results of the item with the lowest mean value: used other auditory resources. As seen in the results, in 71 of the lessons, auditory resources other than music (i.e. item 7) and audio recordings (i.e. item 8) were rarely or never used. In only one lesson, the teacher used repetition drills during 30% of their lesson, which was categorized under other auditory resources.

DISCUSSION

Concerning the first research question, research results showed that most of the teachers reported using multimodality in their instruction frequently. They stated high levels of awareness regarding the benefits of multimodality and they preferred multimodal instruction over unimodal teaching. They commented that they used visuals along with verbal instruction, technological tools to help students understand the subject matter better, body language accompanied with speech, and content from different sources (i.e. newspaper, television, social media) in their lessons.

As for the second research question, according to the observations, most of the teachers used only one or two modes (i.e. verbal, or written) in their instruction. They did not pay attention to their voice or intonation during teaching, and also they did not pay attention to their body language as they previously claimed. Therefore, it can be concluded with the third research question that there is an incongruence between teachers' statements and their actual practices regarding multimodality. The findings of the questionnaire and the observations suggest that teachers stated their preference for using various modes in their instruction. However, although diagrams, tables, or pictures were used to some extent, music was never used in 80% percent of the lessons, and in nearly 74% of their lessons, animations or video recordings were never used according to the observations. In addition, as mentioned above, most of the diagrams, tables, or pictures used in the lessons were the visuals in the coursebooks. On the other hand, 66% of the participants (n=98) reported using technological tools (e.g. Edmodo, Google Classroom, Kahoot) to help students understand the subject better. However, in reality, in 53% (n=38) of their lessons, a website, or the internet was never used, and in 88% of their lessons (n=63) technological tools (i.e. apps) were not used. Although a direct comparison could not be made between the current research and the previous studies because of the lack of relevant literature, the present research and previous studies can be compared in terms of different aspects.

In Ajayi's (2010) study, 48 student teachers were investigated in terms of their knowledge of and insights into their teacher training programs from a multimodality perspective. The study revealed that prospective teachers had a high awareness of the effects of the new technologies on literacy learning and instruction. Although the participants of Ajayi's study were pre-service teachers, the results are consistent with the current research in that, the teachers in the current study were also aware of the benefits of multimodal instruction on students' motivation and comprehension.

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), and Papageorgiou and Lemeras' (2017) studies. In Yi and Choi' (2015) study, for instance, 25 teachers in the USA were investigated for their opinions regarding multimodal instruction. Teachers were positive about the opportunities multimodal practices provide in teaching. The results of the present research are also in line with Ryu and Boggs' (2016) study. In their study, teachers' perceptions of multimodality were investigated and according to the results, teachers reported positive effects of multimodality on their students' writing motivation. Participants in the current research also stated their awareness regarding the benefits of integrating multimodality in their practice.

Finally, in Papageorgiou and Lemeras's (2017) study, teachers' experiences, approaches, and practices regarding multimodality were studied. It was found that the teachers viewed multimodality as a means for imparting information, enacting collaborative learning, and preparing students for exploring concepts and more than half of the teachers reported using multimodality in their practice. The questionnaire results of the current research showed a similar tendency. Approximately 94% of the teachers (n=139) in the current research stated that they thought the visual, auditory, and interactive contents were more effective than unimodal instruction. In addition, nearly 89% of them (n=132) 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 Yılmaz Yakışık's (2015)

study, for example, pre-service EFL teachers have high multimodal literacy levels. The results of the present research suggested a similar outcome. The participants reported that they prefer using graphics, tables, pictures, and photos in their instruction.
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. This result is consistent with the results of our research. Most of the participants reported that throughout the distance education process, they used different means of instruction effectively in their lessons.

On the other hand, in Tüzel's (2013) study, prospective Turkish language teachers' views regarding multimodal literacy teaching were investigated and it was found that the teacher candidates needed to develop new skills for multimodal literacy. Also, it was reported that nearly all of the students did not have an awareness of the multimodal text structure. Contrastingly, the results of the current study suggest that teachers have a high level of awareness regarding multimodal text structure.

CONCLUSION

The unexpected advent of the COVID-19 pandemic changed the way we live irreversibly. The terms, which were once regarded as fancy titles for trendy research, like telecommuting, hybrid/distance/online education, or remote learning are a part of our daily lives now. Although the pandemic is over, educational institutions continue distance education to some extent: part of the lessons, meetings, or even exams can be held online. Since online education is an indispensable part of instruction now, it is our duty, as teachers, to approximate online learning environments to face-to-face classroom contexts as much as we can. To achieve this goal, educators should acknowledge the multimodal nature of face-to-face communication. In their daily lives, human beings arbitrarily make use of multiple modalities to convey their messages and make meaning. Therefore, lessons that are consisted of, and completed by a single mode of teaching such as direct verbal instruction, or a reading text would contradict this fact to a great extent. Instead, teachers, just like in real life, should make use of multimodality in their lessons to address the various learning styles of their students and to help them in their meaning-making processes. 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. The number of studies on the actual practices of in-service teachers from a multimodality point of view is relatively few. Most of the existing research on teachers' actual practices is based on the self-reports of the teachers or students. This gap is even bigger in distance education settings and in the Turkish context.

The present research is unique in investigating the beliefs, preferences, attitudes, and most importantly the actual practices of in-service teachers in Türkiye in distance education settings during the COVID-19 pandemic. 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 students are surrounded by multimodal environments, it might be a necessity for teachers to equip themselves with multimodal instruction skills. Therefore, it is expected by the pioneering of this research that the studies on the field of social semiotics and multimodality gain pace in the Turkish context.

Pedagogical Implications

The implications of the research can be discussed from four different points of view: firstly, from a teacher education point of view, secondly from the Ministry of National Education point of view, thirdly from the teachers' personal development point of view, and finally from an in-class practical point of view. Firstly, one of the main complaints of the teachers in previous 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 in multimodal instruction. Instead, they developed themselves through time, adopting a somewhat multimodal way of instruction. However, these implementations cannot go beyond personal practices and cannot be disseminated and standardized throughout the educational system. This can also be seen in the practices of the teachers in the current research. 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 training programs at 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 adopting a more practical internship program.

Secondly, one of the major problems that the teachers reported was the lack of effective in-service training and the misapplications of the MoNE (Gök & Yıldırım, 2015). 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 a practical in-service training program. A wide majority of the existing in-service training provided by the MoNE is theoretical education that was done just for the sake of doing. Therefore, with the insight gained by this research, the Ministry 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 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 manner. They only used multimodal mediums arbitrarily as a result of their experiences, during the flow of the lessons. Therefore, the lessons in which 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 and/or teachers can create resources that provide satisfactory information for the application and adoption of multimodality in instruction, resulting in a rise in the multimodal awareness of firstly the teachers, 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 research results, since teachers, students, and educational authorities realized the benefits of online education, it can be suggested that the future of education will not solely depend on face-to-face instruction as it was in the past. It can be expected that there will be a more hybrid 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 to be ready to meet the requirements of a more mixed education design.

Finally, from a practical point of view, it is a long-known fact that different 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 and modify 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.

Limitations of the Study

The present research was not intended as a comparative investigation between English teachers and teachers of other school subjects. Furthermore, because of the bureaucratic and temporal limitations, a detailed comparison between the schooling levels in terms of multimodality could not be carried out. The results from the teachers who participated in the study were analyzed holistically.
In addition, the observations 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 uninvestigated. Finally, the current research was carried out only in distance lessons. Therefore, the questionnaire and observations of the teachers' actual practices were limited to online lessons only. It should be remembered 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, the school district, and the physical conditions of the schools can be included in future research. Furthermore, this research included 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 unexplored. Future studies comparing other fields of study such as Literature, Physics, Chemistry, Visual Arts, Physical Education, and Music could contribute to the literature greatly.

Finally, another aspect that should be paid attention to is the mode of education. As mentioned above, only distance lessons were investigated in the present research. For this reason, future studies examining the teachers' practices in their face-to-face lessons in terms of multimodality would be invaluable for the literature.

Ethics and Consent: Ethics committee approval for this study was received from the Ethics Committee of Kocaeli University (Date: 07/07/2021; Approval Number: 16).

REFERENCES

Ajayi, L. (2010). Preservice teachers' knowledge, attitudes, and perception of their preparation to teach multiliteracies/multimodality. *The Teacher Educator, 46*(1), 6-31. https://doi.org/10.1080/08878730.2010.488279

Akayoglu, S., Satar, M., Dikilitas, K., Cirit, N. C., & Korkmazgil, S. (2020). Digital literacy practices of Turkish pre-service EFL teachers. *Australasian Journal of Educational Technology, 36*(1), 85-97.

Ally, F., Pillay, J. D., & Govender, N. (2022). Teaching and learning considerations during the COVID-19 pandemic: Supporting multimodal student learning preferences. *African Journal of Health Professions Education 14*(1), 13-16.

Andrews, J., Holmes P., Fay, R., & Dawson, S. (2020). Researching multilingually in applied linguistics. In J. McKinley & H. Rose (Eds.), *The routledge handbook of research methods in applied linguistics*. London: Routledge.

Bakioğlu, B., & Çevik, M. (2020). Science teachers' views on distance education in the COVID-19 pandemic process. *Turkish Studies, 15*(4), 109-129.

Baldry, A., & Thibault, P. J. (2006). *Multimodal transcription and text analysis: A multimedia toolkit and coursebook.* London: Oakville, Equinox.

Bateman, J. (2008). *Multimodality and genre*. New York: Palgrave Macmillan.

Bateman, J., Wildfeuer, J., & Hiippala (2017). *Multimodality*. De Gruyter Mouton.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. Washington, DC: Internal Society for Technology in Education.

Board of Education and Discipline (2018). *English language teaching curriculum*. Retrieved September 5th 2022 from: https://mufredat.meb.gov.tr/Dosyalar/201812411191321-%C4%B0NG%C4%B0L%C4%B0ZCE%20%C3%96%C4%9ERET%C4%B0M%20PROGRAMI%20Klas%C3%B6r%C3%BC.pdf

Bonk, C.J. & Graham, C.R. (2006). *The handbook of blended learning environments: Global perspectives, local designs*. San Francisco: Jossey-Bass/Pfeiffer.

Bulut, B., Ulu, H., & Kan, A. (2015). Multimodal literacy scale: A study of validity and reliability. *Eurasian Journal of Educational Research, 61*, 45-60.

Cárcamo, M. M. A., Cartes, R. A. C., Velásquez, N. E. E., & Larenas, C. H. D. (2016). The impact of multimodal instruction on the acquisition of vocabulary. *Trabalhos em Linguística Aplicada, 55*(1), 129-154. https://doi.org/10.1590/010318134842170942

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. New York: Routledge.

Dörnyei, Z. & Taguchi, T. (2010). *Questionnaires in second language research: Construction, administration, and processing*. Routledge.

Drijvers, L., & Holler, J. (2022) The multimodal facilitation effect in human communication. *Psychon Bull Rev*. https://doi.org/10.3758/s13423-022-02178-x

Ekşi, G., & Yılmaz Yakışık, B. (2015). An investigation of prospective English language teachers'multimodal literacy. *Procedia-Social and Behavioral Sciences, 199*, 464-471.

Friedman, D. A. (2012). How to collect and analyze qualitative data. In A. Mackey & S. M. Gass (Eds.), *Research methods in second language acquisition: A practical guide*. Wiley-Blackwell.

Gilakjani, A. P., Ismail, H. N., & Ahmadi, S. M. (2011). The effect of multimodal learning models on language teaching and learning. *Theory and Practice in Language Studies, 1*(10), 1321-1327. Doi:10.4304/tpls.1.10.1321-1327

Goodwin, C. (2000). Practices of seeing: Visual analysis: An ethnomethodological approach. In T. V. Leeuwen & C. Jewitt (Eds.), *Handbook of visual analysis* (pp. 157-182). London: Sage Publications.

Gök, A. & Yıldırım, Z. (2015). Views and demands of teachers about in-service training within the scope of Fatih Project. *Kastamonu Eğitim Dergisi, 24*(3), 1453-1468.

University of London. (2023, July 12). *History of the University of London*. https://www.london.ac.uk/about-us/history-university-london

Holler, J., & Levinson, S. C. (2019). Multimodal Language Processing in Human Communication. *Trends in cognitive sciences, 23*(8), 639–652. https://doi.org/10.1016/j.tics.2019.05.006

Jewitt, C. (Ed.) (2009). *The Routledge handbook of multimodal analysis*. London: Routledge.

Jewitt, C., Bezemer, J., & O'Halloran, K. (2016). *Introducing multimodality*. Routledge.

Kress, G., & van Leeuwen, T. (1996). *Reading images: The grammar of visual design*. Routledge.

Kress, G., & Leeuwen, T. V. (2001). *Multimodal discourse: The modes and media of contemporary communication*. Oxford University Press.

Kress, G., & Leeuwen, T. V. (2006). *Reading images: The grammar of visual design*. Routledge.

Kress, G. (2014). Design. In A. Archer & D. Newfield (Eds.), *Multimodal approaches to research and pedagogy: Recognition, resources and access* (pp. 131-152). Routledge

Kumaravadivelu, B. (1994). The postmethod condition: (E)merging strategies for second/foreign language teaching. *TESOL Quarterly, 28*(1), 27-48.

Lemke, J. (2009). Multimodal genres and transmedia traversals: Social semiotics and the political economy of the sign. *Semiotica, 2009*(173), 283-297. Doi: 10.1515/semi.2009.012

Masalimova, A. R., Khvatova, M.A., Chikileva, L.S., Zvyagintseva, E. P., Stepanova, V. V. & Melnik, M. V. (2022). Distance Learning in Higher Education During COVID-19. *Frontiers in Education, 7*(822958). Doi: 10.3389/feduc.2022.822958

Nunan, D. (1991). *Language teaching methodology*. London: Prentice-Hall.

O'Halloran, K. L. (1999). Interdependence, interaction and metaphor in multisemiotic texts. *Social Semiotics, 9*(3), 317-354. Doi: 10.1080/10350339909360442

O'Toole, M. (1994). *The language of displayed art*. Fairleigh Dickinson University Press.

O'Toole, M. (2010). *The language of displayed art*. Routledge.

Papageorgiou, V., & Lameras, P. (2017). Multimodal teaching and learning with the use of technology: Meanings, practices and discourses. *International Association for Development of the Information Society,* 133-141.

Perniss, P. (2018). Why we should study multimodal language. *Front. Psychol, 9*(1109), 1-5. Doi: 10.3389/fpsyg.2018.01109

Ryu, J., & Boggs, G. (2016). Teachers' perceptions about teaching multimodal composition: The case study of Korean English teachers at secondary schools. *English Language Teaching, 9*(6), 52-60.

Sankey, M. D. (2006). A neomillennial learning approach: Helping non-traditional learners studying at a distance. The *International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2*(4), 82-99.

Sari, I. P., Sormin, R. K., Purba, A., Setiawati. & Siregar, E. S. (2023). The implementation of multimodal approach to teaching English online in the COVID–19. *Journal of Applied Linguistics, 3*, 7-19. DOI: 10.52622/joal.v3i1.140.

Schuir, J., Anton, E., Eleks, M. & Teuteberg, F. (2022). Tell me and I forget, involve me and I learn: Design and evaluation of a multimodal conversational agent for supporting distance learning. *Wirtschaftsinformatik 2022 Proceedings*. https://aisel.aisnet.org/wi2022/digital_education/digital_education/2

Sudman, S., & Bradburn, N. M. (1983). *Asking questions*. San Francisco, CA: Jossey-Bass.

Tan, X., & Matsuda, P. K. (2020). Teacher beliefs and pedagogical practices of integrating multimodality into first-year composition. *Computers and Composition, 58*(2020), 102614. https://doi.org/10.1016/j.compcom.2020.102614

Thompson, M. (2008). Multimodal teaching and learning: Creating spaces for content teachers. *Journal of Adolescent & Adult Literacy, 52*(2), 144–153. http://www.jstor.org/stable/20111751

Tüzel, S. (2013). Integrating multimodal literacy instruction into Turkish language teacher education: An action research study. *Anthropologist, 16*(3), 619-630.

Ulu, H., Avşar-Tuncay, A. & Baş, Ö. (2017). The relationship between multimodal literacy of pre-service teachers and their perception of self-efficacy in critical reading. *Journal of Education and Training Studies, 5*(12), 85–91.

Ulu, H., & Avşar-Tuncay, A. (2017). Investigation of multimodal literacy levels of pre-service teachers. *Turkish Studies, 12*(25), 763–778. http://dx.doi.org/10.7827/TurkishStudies.12303

Vasudevan, L., DeJaynes, T., & Schmier, S. (2010). Multimodal pedagogies: Playing, teaching, and learning with adolescents' digital literacies. In D. Alvermann (Ed.), *Adolescents' online literacies: Connecting classrooms, digital media, and online culture* (pp. 5-26). New York, NY: Peter Lang.

Yi, Y., & Choi, J. (2015). Teachers' views of multimodal practices in K-12 classrooms: Voices from teachers in the United States. *TESOL Quarterly, 49*(4), 838-847. https://www.jstor.org/stable/43893789