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Functions and Teaching its Spelling of -de Morphology and de Conjunction

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Abstract Keywords

In this study, the effect of teaching activities prepared according to Functional Grammar on secondary school students' learning of the functions and spelling of morphemes and conjunction was investigated. To observe this effect, teaching was carried out following the principles of Functional Grammar to be used in teaching the functions and spelling of de morpheme and conjunction. The study group research consists of 76 secondary school students and 4 Turkish teachers. This research was designed and conducted in a mixed method design, in which qualitative and quantitative research techniques were used together. The quantitative dimension of the study was in a single group pre- and post-test weak experimental model; the qualitative dimension was carried out with a case study. In the collection of quantitative data, the listening activity, which was prepared according to the fill-in-the-blank technique, and included the functions of de morpheme and conjunction, was used as a pre-and post-test. A structured interview form was used to collect qualitative data. As a result of the research, it has been observed that the general success in the functions and spelling of the morpheme and conjunction in the 6th, 7th, and 8th grades has increased significantly. It has been observed that there is a significant and positive increase in all grade levels in learning the conjunction function and separate spelling of de, which has become a chronic problem. In addition, it was determined that secondary school students were successful in learning the locative of the morpheme in the noun task, the time functions in the adverb task, and its spelling. However, secondary school students could not make progress in the case function and spelling of the -de morpheme in the adverb task. Teachers and students, whose opinions were taken in support of these positive results, stated that the teaching activities prepared according to Functional Grammar are fun, instructive, permanent, and enable active participation in the lesson. Accordingly, the teaching of the spelling of the morpheme de in the conjunction functions of locative, tense, and its conjunction started to be given from the 5th grade; it has been suggested that the case function of the morpheme and the teaching of spelling skills should be postponed to secondary education. Thus, a functional teaching method should be adopted gradually in teaching the functions and spelling of -de morpheme and conjunction.

Functional grammar Functions of de morpheme and conjunction Secondary school students Spelling teaching Teaching grammar

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Introduction

The first contemporary and scientific studies on language started with Ferdinand de Saussure, the founder of structural linguistics in the 19th century, and many concepts used in linguistics were identified with him (Rifat, 1990). Following this development, theories and traditions have emerged to explain language, the ability to use language, and knowledge of the language, which is a human-specific ability. These are divided into two main approaches in linguistics: those that center form and those that center function. In the formalist approach, language is treated as an abstract system (Luraghi & Parodi, 2008) and a set of sentences (Schaaik, 1998); thus, the mathematics of the language, in other words, its logic, is tried to be explained (Can, 2018). In the formalist approach, language has an autonomous structure because of the autonomy of syntax. Therefore, language is context-free (Aksan, 1993). One of the widely accepted theories that adopted the formalist approach is the Generative Transformational Grammar, founded by Chomsky. According to this theory, the ability to acquire language is innate and unique to humans. All languages have common features, namely universal features. The largest linguistic unit in this theory is the sentence; therefore, the syntax of a language that brings together sound in speech, sign, and meaning in writing is the focus of this theory (Kayabaşı, 2018). Later, a new tradition, known as functionalism, emerged in Europe, in which the functions of language were the theoretical basis and focus of their studies. With the Prague Linguistics School, the functional dimension of language came to the fore and it was stated that the main point was the communicative aspect of language (Fontaine, 2003; Vardar, 2007). Because the most important function of language in Functional Grammar is communication, language is a communication tool (Luraghi & Parodi, 2008; Schaaik, 1998; Yozgat, 2018). Therefore, language is not a separate system in itself; it is considered a tool of social interaction (İmer, Kocaman, & Özsoy, 2011). According to Martinet, who is known as the founder of Functional Grammar, and the representative of the Prague Linguistics School, the main function of the language skill, which varies from community to community, is communication, although its function is the same. However, language, whose only function is not communication, also has functions of originating thought, comprehension-expression, and art (Martinet, 1998).

Functional Linguistics was adopted and developed by the Prague Linguistics School; it is a method of structural linguistics that aims to make linguistic description within the framework of these concepts, considering the purpose of using an utterance, the functions and functions of language units in the discourse or text, and their functions in communication (İmer et al., 2011). In this method, linguistic expressions are examined in terms of their functions in communication, and linguistic descriptions are made through functions (Vardar, 2007). According to Functional Grammar, language is a pragmatic phenomenon, and language systems are formed according to the communication function (Aksan, 1993). According to this understanding, linguistic units are evaluated together with the discourse or text in which they are included in linguistic units since they do not have a value on their own. Thus, each linguistic unit has a function in the system it is in, and this function can only be described according to the relationship that the linguistic unit establishes with other linguistic units (Ekinci Çelikpazu, 2012). According to Larsen-Freeman (2003), grammar skill is a dynamic process in which people use linguistic structures of a language to create meaning following the context. In addition, grammar learning is a three-dimensional process that does not have a hierarchical order between them in the form of "form-meaning-use" and affects each other.

Enunciation Theory, Systematic Functional Grammar, and Functional Grammar can be given as examples of theories that adopt the functionalist approach. Accordingly, Benveniste dealt with the context-based functioning of the language according to the Enunciation Theory (Kıran & Kıran, 2010). Halliday, on the other hand, examined language as a functional system in the Systematic Functional Grammar Theory (Kerimoğlu, 2016). According to Halliday, who defends four basic theoretical claims in his theory, language use is functional. The function of language is to produce meaning (Eggins, 2014). Accordingly, grammar is seen as a source from which meaning is produced (Firth, 1957; Matthiessen & Halliday, 2009). In addition, these meanings are affected by the social and cultural context they are in. However, using a language is a semiotic process (Eggins, 2014). In other words, Halliday; has adopted a functional approach by prioritizing the concepts of function, meaning, context, and sign-in language analysis and explanations. Dutch linguist Dik accepts language as a social interaction tool in his

Functional Grammar Theory, and according to this, the main function of language is to provide communication between people. Therefore, the use of language is a social and collaborative activity as it is for at least two people. Based on these assumptions, Functional Grammar deals with two sets of rules. These are semantic, syntactic, morphological, and phonological rules; as operant/pragmatic rules. The first group of these rules regulates the formation of linguistic expressions, while the second group regulates the oral interaction patterns in which linguistic expressions are used (Dik, 1997).

The focus of the theories that have adopted the functionalist approach, which has been outlined above, is not formal and syntactic; functional and semantic. These theories are; Contrary to formal theories, it does not accept the sentence as the object of study, but the text, which is the largest linguistic unit. In addition, the point of view of these theories is pragmatism, which refers to the use of language (Halliday, 2004). However, the main function of language is to provide communication between people, and in this process, the context is the top component of the language, including the expression and content planes. Because linguistic expressions are explained and interpreted together with the cultural and social context in which they are found. For this reason, content that is encountered in real life and that provides written or oral communication should be included in language teaching. To summarize; although formalist and functionalist approaches form two separate traditions in the linguistics tradition, this is a richness and an opportunity for language studies. Aksan (1993) states in his research in which he introduced formalist and functionalist approaches, that having different approaches to language does not mean that one will exclude or falsify the other. In support of this view, Çiçek and Dolunay (2021) taught in a pattern in which they combined the data of the Management and Context Theory, which represents the formalist approach developed by Chomsky on the roof of action in the 8th-grade, with the principles of Functional Grammar, and achieved successful results. The functions of the morpheme -de and the conjunction de, which started from basic education and continued until higher education and became chronic, and the teaching of its spelling was the subject of this research. As it is known, the morpheme and the conjunction -de/de have different functions such as locative, time, case, and conjunction (Ediskun, 2017; Gencan, 1979; Korkmaz, 2017; TDK Sözlük, 2011). In this study, which is based on Functional Grammar, the writing of the morpheme and the conjunction of -de and the most frequently used locative, time, case, and conjunction functions in secondary school are discussed.

In studies conducted on this subject at different grade levels, it was found that students had difficulties in writing the morpheme and conjunction (Akkaya, 2013; Bayram & Erdemir, 2006; Hamzadayı & Çetinkaya, 2013; Karabuğa, 2011; Karagül, 2010; Kemiksiz, 2020; Kırbaş, 2006; Oğuz, 2012; Uludağ & Yıldırım, 2016). According to the results of this research; it has been revealed that starting from basic education (Bayram & Erdemir, 2006; Oğuz, 2012) until higher education, students could not acquire the ability to write them adjacent or separate depending on the functions of morphemes and conjunction in the text (Karabuğa, 2011). It is hoped that the successful results obtained from this research will offer a different functional method to the teaching of the spelling of the -de morpheme and conjunction, which has become a chronic problem in spelling teaching. Therefore, this study, unlike the previous ones, is aimed to teach the functions and spelling of conjunction and the morpheme with the understanding of Functional Grammar teaching. For this purpose, the problem sentence and subproblems of the research were determined as follows:

Problem Statement

Are the teaching activities prepared according to Functional Grammar effective in learning the functions and spelling of -de and morphemes and conjunctions?

Sub Issues

- 1. Is there a significant difference between the pre-post test scores of the 5th, 6th, 7th, and 8th-grade students' locative, time, and case of the de morpheme and the conjunction function of the conjunction and general achievement?
- 2. What are the opinions of the practitioner teachers about the teaching activities prepared according to Functional Grammar?
- 3. What are the students' opinions about the teaching activities prepared according to Functional Grammar?

Method

1. Research design and method

This research, which aims to teach the functions and spelling of conjunctions and morphemes, with the teaching activities prepared according to Functional Grammar, was designed in a mixed method design (Creswell & Creswell, 2018). The mixed method has varieties such as convergent parallel, exploratory sequential, and exploratory sequential (Creswell & Creswell, 2017). This research was designed in an "exploratory sequential mixed design" depending on the data collection method and process in order to solve the research questions and sub-questions. In this mixed design, quantitative and qualitative data are collected before and after the experimental procedure. Then, all the data obtained from the research process are interpreted and discussed together.

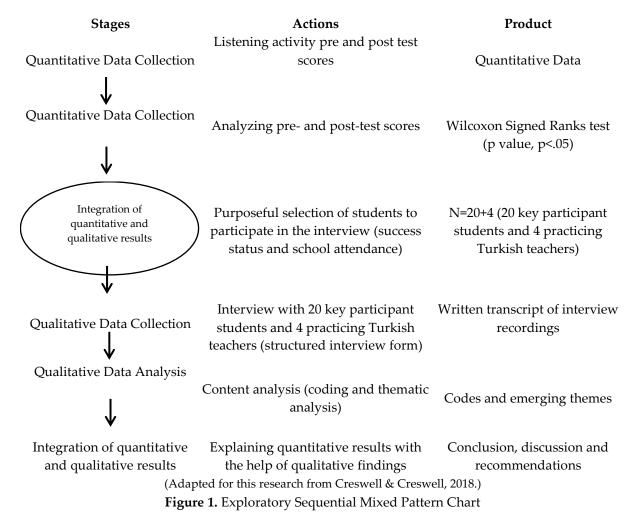


Figure 1. shows the view of the "exploratory sequential mixed pattern" used in this study. In this study, titled "Functions and Teaching its Spelling of -de Morphology and de Conjunction", the first quantitative data were obtained by applying a pre-test to the students in the study group before the experimental procedure, and then Turkish lessons were carried out with teaching activities prepared according to Functional Grammar for two hours a week for four weeks. After the completion of the teaching activities, the final quantitative data were obtained by applying the posttest to the students in the study group, thus the quantitative process of the research was completed. In addition, the qualitative data of the research were collected from the teachers and students in the study group with the structured interview technique. After the experimental process was completed, a total of 20 students were interviewed, once with five students selected from each grade level. In addition to this, 4 Turkish teachers who applied the teaching activities were interviewed once. Thus, 24 structured interview forms were obtained. In the reporting process of the research, qualitative and quantitative data were analyzed

and the results were evaluated together. In other words, the effect of the teaching activities prepared according to Functional Grammar is explained by describing the functions of the morpheme and conjunction in the teaching of its spelling, both quantitatively and qualitatively.

The quantitative dimension of the study was carried out in the "single group pre-post test weak experimental model". In this model, which is also called repeated measurements or single factor ingroup design, measurements made with the measurement tool, which is the dependent variable; the pre-test before the experimental procedure and the post-test after the experimental procedure are performed on the same group with the same measurement tool (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel). In other words, there is only the experimental group in this model, there is no control group.

Table 1. Pattern of the quantitative dimension of the study

Groups	Pretest	Experimental Process	Posttest
Fula (the 7th are d 0th	\mathbf{M}_1	X	M_2
5th, 6th, 7th, and 8th- grade students	listening activity	Implementing 4 weeks of	listening activity
	(measuring tool)	grammar teaching activities	(measuring tool)

Table 1 shows the view of the model used in the quantitative dimension of the research. As seen in the table;

M1: The pre-test scores of the experimental groups from the listening activity,

X: Teaching activities prepared according to Functional Grammar for four weeks in the experimental groups for two-course hours each week,

M2: It refers to the post-test scores of the experimental groups from the listening activity.

The qualitative dimension of the research was conducted as a case study (Davey, 2009) to explain the results of the application and to reveal what should be considered in future studies. For this purpose, the interview technique was used to collect the participants' opinions in the collection of qualitative data. The interview is a qualitative research technique that is carried out in the form of question and answer with the person or persons determined in advance according to the purposes of the research (Büyüköztürk et al., 2018). The face-to-face interview type of this technique provides indirect information from different perspectives of the interviewees, and this technique is useful when research participants cannot be observed directly (Creswell & Creswell, 2017). There are three types of interview techniques structured, semi-structured, and unstructured (Büyüköztürk et al., 2018; Yıldırım & Şimşek, 2008). The interviews in this research were conducted by the "structured interview technique". Following this interview technique, 20 students and 4 Turkish teachers, who were determined as key participants, were asked pre-prepared interview questions following the research objectives, and the answers given to these questions were recorded in writing. This type of interview; enables the data to be quickly coded, analyzed, and to reach the targeted categories (Büyüköztürk et al., 2018). In other words, a structured interview saves time and effort by providing direct access to the desired information.

2. The study group

Purposive sampling method was used to determine the study group of the research. Purposeful sampling, which enables the determination of rich data situations for the purposes of a research, provides an opportunity for detailed examination (Büyüköztürk et al., 2018). For this reason, considering that rich data will be presented in this research, a secondary school located in Düzce Central district was taken as a sample, one branch from each grade level of this secondary school was randomly selected and these were combined. Thus, the study group of the research was formed.

Table 2. Demographic information on students and teachers in the study group

Demographic info	ormation abou	ıt students	in the study group		
Grade	5	21	Gender	Female	39
	6	18			
	7	19		Male	37
	8	18			
	Total	76		Total	76
Demographic info	ormation abou	ıt the stude	ents whose opinions were	taken	
Grade	5	5	Gender	Female	12
	6	5			
	7	5		Male	8
	8	5			
	Total	20		Total	20
Information abou	t the practitio	ner teacher	s whose opinions were ta	ken	
Gender	Female	4	Graduate level	Undergraduate	3
	Male	0		Master	1
Years of service	9	1	Age	20-30 about	1
	11	1			
	12	1		30-40 about	3
	15	1			
	Total	4		Total	4

There are a total of 76 secondary school students in the study group. Of these, 21 students are in the 5th grade, 18 students are in the 6th grade, 19 students are in the 7th grade, and 18 students are in the 8th grade. 39 of these students are female and 37 of them are male. In addition, after the completion of the experimental process, opinions about the teaching activities were obtained from a total of 20 students, five from each grade level. 12 of the students whose opinions were taken are girls and 8 of them are boys. Opinions were taken from 4 different Turkish teachers who applied the teaching activities in the research. All 4 of these teachers are women and have been serving as Turkish teachers for 9, 11, 12, and 15 years. 3 of the teachers have a bachelor's degree and 1 has a master's degree. One teacher is between the ages of 20-30 and 3 teachers are between the ages of 30-40.

3. Data collection tools and process

To determine the success of the students in the study group before and after the experimental process, in terms of the functions and spelling of the conjunction and the morpheme, a "listening activity" based on the filling-in-the-blank principle prepared by the researchers was used as a pre-post test. In this worksheet, in which Michael Engler's text "Mr. Rabbit Has an Idea" is used, there are 26-item gaps related to the locative, time, and case of the -de morpheme and the conjunction functions of the conjunction. Turkish teachers who implemented the teaching activities had the students listen to the audio recording of this text using smart boards as a pre-post test. Meanwhile, the students filled in the gaps related to the functions and spelling of the conjunction -de morpheme and the conjunction according to the text they listened to. Accordingly, each correct spelling was scored as 1 and misspelled as 0, and the total score a student got from the worksheet in the functions and spelling of the conjunction de morpheme was calculated. Thus, the learning achievements of the students in the study group of the research regarding the functions and spelling of -de morpheme and conjunctions were determined.

Structured interview forms were prepared to get the opinions of Turkish teachers and secondary school students participating in the research on the teaching activities prepared according to Functional Grammar. In the form prepared to receive the opinions of Turkish teachers, there are interview questions about the positive and negative aspects of teaching activities and their suggestions, if any. In the form prepared to get the opinions of the students, the students were asked to evaluate the teaching activities and to express their likes and dislikes about the teaching activities. The qualitative

data obtained from the research were used to explain and support the quantitative data. Then, these forms were presented to the opinion of two different field experts on the subject. The forms were finalized after feedback from field experts on content, grammar, spelling, and punctuation. Accordingly, 3 different open-ended questions in the form prepared for Turkish teachers; In the form prepared for the students, 3 different open-ended questions were included. Thus, opinions about the teaching activities prepared according to Functional Grammar were obtained from the Turkish teachers and secondary school students in the study group. These views were used to explain and consolidate the quantitative data obtained from the research.

4. The process of preparing and implementing teaching activities

In order to teach the functions and spelling of -de/de according to Functional Grammar, 4-week teaching activities were prepared using three reading and one listening texts included in a theme in the Turkish textbook. In the preparation of these activities, the principles of Functional Grammar, which constitute the theoretical foundations of this research, were taken as basis. In addition, teaching activities to be used in the research were developed by making use of the grammar teaching principles included in the Turkish Language Curriculum (Ministry of National Education [MoNE], 2018). The criteria used to develop instructional activities are shown below.

Table 3. Criteria for preparation of teaching activities

- 1. In the teaching activities, the functions and spelling of -de/de were evaluated with the relationship of -de/de with the previous and next words.
- 2. Listening and reading texts were used in teaching activities.
- 3. In teaching activities, context was used to distinguish the functions and spelling of -de/de.
- 4. Teaching activities are associated with four basic language skills.
- 5. The phonetic difference between de morpheme and conjunction de is used in teaching activities.
- 6. The teaching activities are suitable for the Turkish Language Curriculum (MoNE, 2018) and the achievements in the lesson plan.
- 7. Intuition method was used in teaching activities.
- 8. An understandable and clear language was used in the teaching activities.
- 9. Teaching activities are unique.

Teaching activities were prepared according to the criteria listed in Table 3; expert opinions were taken from two different academicians who are experts in the field of linguistics and grammar teaching regarding the theoretical foundations of the research and its suitability for research purposes. The experts evaluated the compliance of the four-week teaching activities with the criteria seen in Table 3 as 0 (insufficient), 1 (partially sufficient), and 2 (adequate). As a result of the positive evaluations and additional opinions from the experts, the teaching activities were finalized.

According to Functional Grammar, since a linguistic unit is evaluated with the text it is in, a text-based lesson, in other words, teaching the function in context, is planned every week. According to this approach, each linguistic unit has a function and this function is evaluated with other linguistic units. Accordingly, the locative, time, case, or conjunction function of -de/de as a result of its relationship with other elements in the sentence it is in, and their separate or adjacent spellings were made aware of the students. The function of -de/de in a sentence was implied to the students based on the context of the text. The usage functions of -de/de were asked to the students: "Which meaning function (locative, time, case, additive) emerged thanks to this in/? What meaning did -de/de add to this sentence?" taught with questions such as: After this stage, the students were asked to pay attention to how -de/de is written in the sentence according to its usage function with the words before or after it. In the locative, time, and case function of -de/de, students are adjacent to the word before it; when used in the adder function, they were able to learn by seeing that it was written separately from the word before and after it. However, teaching activities were associated with four basic language skills. Because the most basic function of spoken and written language in Functional Grammar is to provide communication. Accordingly, a listening activity prepared as fill-in-the-blank was used to obtain quantitative data before

and after the application. In addition, for three weeks, the teachers read the reading texts aloud. Meanwhile, the students determined the sentences in/by using the selective listening technique. Then, the students learned the usage functions of -de/de in these sentences by questioning them under the guidance of the teacher. Thus, it was ensured that the students learned that -de/de is used in locative, time, case, and conjunction functions and that it is written separately in the adder function and adjacent in other functions. In the fourth week, the students listened to the digital listening text from the recording instead of the reading texts. In this way, the phonetic difference between the -de morpheme and the conjunction de is also utilized in the research. When one of the syllables in a word or one of the words in a sentence is pronounced more strongly than the others, stress causes a difference in meaning. The conjunction also transfers the stress to the word before it. While listening and reading texts are used in the research, the differences in emphasis between the morpheme and conjunction were tried to be perceived. For this purpose, worksheets containing the sentences in which -de/de in the listening text were written were given to the students. In these worksheets, students were asked to write -de/de separately or adjacent to the words before and after them, according to their conclusions regarding the usage function of -de/de. In this way, the functions and spellings of -de/de in both reading texts and listening texts are taught.

Before the implementation process starts, 4 practitioner teachers; were informed about the theoretical foundations, purpose, and method of the research. In addition, the lesson plans prepared for the teaching of -de/de, which the researchers had previously prepared, were given to the teachers and the implementation process of the plan was explained. According to this plan, in the first lesson hour, the practicing teacher asked the students to underline the places where -de/de was while reading the first text of the related theme in the Turkish textbook. Afterward, the teacher, who checked whether the sentences containing the conjunction with the -de morpheme were determined correctly or not, distributed the worksheets prepared by the researchers, in which these sentences were written, to the class. Students under the guidance of teachers; He discovered the locative, time, case, and conjunction functions of -de/de. In the second step of the application, the attention of the students was drawn to the situation where -de/de is written adjacent or separately with the words that come before and after it, depending on its function. The usage function and spelling of -de/de for each sentence with "de/de" in the text were determined on the worksheets under the guidance of the teacher. When any function of de/de starts to repeat frequently, the teaching of this function has been completed to prevent students from getting bored. Thus, it was ensured that the students were faced with the locative, time, case, conjunction function, and spelling of -de/de every week.

5. Analysis of data

The research was planned according to the exploratory sequential mixed design, which is one of the mixed designs. Both quantitative and qualitative data were collected throughout the research process. Both types of data groups were evaluated together, with equal importance given to them. The Shapiro-Wilk Test was used to compare the pre-post-test scores of the students from the "fill-in-theblank listening activity", which is used to determine the success levels of the -de morpheme and the conjunction's functions and spelling, and it was determined that the data did not meet the normality assumption (p<0.05). Therefore, the Wilcoxon Signed Rank Test, one of the non-parametric tests, was used in the analysis of the data. In addition, to measure the effect power of the application, the effect size was calculated for the variables that showed a significant difference as a result of the Wilcoxon Signed Rank Test. The effect size is a statistical value that indicates the deviation level of the obtained findings from the expectations (Cohen, 1988). The effect size for the Wilcoxon Signed Rank Test is calculated by dividing the Z value by the square root of the sum of the number of samples (N) in all groups; that is, it was calculated with the formula $r=Z/\sqrt{N}$. As a result of the calculations, Cohen (1988) stated that if the d value is less than 0.2, the effect size can be interpreted as weak, if it is 0.5, it can be interpreted as a medium, if it is greater than 0.8, it can be interpreted as a large effect, and if it is greater than 1, it can be interpreted as a very large effect.

In the research, the "content analysis method" was used in the analysis of the qualitative data group obtained from the teacher and student interviews after the completion of the experimental process. In this qualitative data analysis technique, there are concepts, relationships, and themes that emerged at the end of the research from the data group examined in depth. Accordingly, concepts are determined by examining the data first, the data is classified according to these concepts, and the main and sub-themes that emerge in this way are determined (Yıldırım & Şimşek, 2008). Similarly, content analysis of the qualitative data obtained from 4 teachers and 20 students interviewed in this study was conducted. Following the content analysis technique, the themes related to the research that emerged in the answers to the interview questions were determined and the relevant data were processed under these themes. Thus, as a result of the analysis, all the themes related to the research were revealed. The views of teachers and students were coded under the themes by giving codes as T1, T2..., and S1, S2... to each participant. In addition, typical examples reflecting the theme were placed under the theme related to participant codes.

6. Validity and reliability

To ensure the validity and reliability of the qualitative data in the research, both researchers separately analyzed the content of the teacher and student interviews. Accordingly, the researchers determined the themes that emerged during the analysis of the written interview documents and interpreted the data related to the themes together. Then, the sample participant added their views to the relevant theme. Then, the researchers came together and compared the themes and participant views they identified during the content analysis process. The final data were evaluated with the reliability formula of Miles and Huberman (1994). According to the evaluation results, it was seen that the reliability level of the data was above 85%. In different data, the researchers re-examined the interviews and came to a common decision and processed these data into the relevant theme. In this way, the harmony between researchers was ensured to the highest level.

7. Ethical consent of the research

In this study, all the rules specified to be followed within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were complied with. None of the actions specified under the heading "Actions Contrary to Scientific Research and Publication Ethics", which is the second part of the directive, have been taken.

Ethics committee permission information

Name of the committee that made the ethical evaluation: Bolu Abant İzzet Baysal University Human Research Ethics Committee in Social Sciences

Date of ethical review decision: 30.12.2021

Ethics assessment document issue number: 2021/541

Findings

1. Findings and comments on the first sub-question: In the first sub-question of the research, firstly, the learning levels of the 5th-graders about the functions of the morpheme and the conjunction and its spelling were examined. In the resolution of this question, the pre-post test z scores obtained by the students from the "filling in the blank activity" regarding the functions and spelling of the conjunction de morpheme and conjunction were used. "Wilcoxon Signed Ranks Test" was used to test whether there is a significant difference between achievement scores before and after instructional activities. The data relating to this are given in Table 4.

Table 4. Pre-post Wilcoxon Signed Ranks Test Results in 5th-grade

Measurement	Pre-post test	N	Mean Rank	Sum of Ranks	Z	p
1de locative	Negative Ranks	3a	4.67	14.00	.000	1.000
	Positive Ranks	4b	3.50	14.00		
	Ties	14c				
2de time	Negative Ranks	5d	5.40	27.00	-1.299	.194
	Positive Ranks	3e	3.00	9.00		
	Ties	13f				
3de case	Negative Ranks	3g	2.50	7.50	1000	.317
	Positive Ranks	1h	2.50	2.50		
	Ties	17i				
4. de conjunction	Negative Ranks	3j	4.67	14.00	-3.264	.001
	Positive Ranks	16k	11.00	176.00		
	Ties	21				
Total	Negative Ranks	7m	9.79	68.50	-1.636	.102
	Positive Ranks	14n	11.61	162.50		
	Ties	00				

In Table 4, 5th-grade students learning level z scores regarding the functions and spelling of de/de are given. It was determined that there was no significant and positive (z=-1.636; p>.102) difference according to the post-test scores of the students' learning levels related to the functions and spelling of -de/de in general. 5th-grade students were significant and positive progress in learning only the conjunction function and spelling of de (z= -3.264; p<.001). When the row numbers of the students were examined, it was seen that 16 out of 21 students improved positively. The effect size (d=-0.71) calculated for teaching the conjunction function and spelling of de is at the medium effect level. It can be said that at the 5th-grade level, students were able to learn the functions and spelling of -de morpheme and the conjunction de, only the conjunction function and spelling of de in a meaningful and positive level; they could not learn the locative, time, case functions and spelling of -de.

Secondly, the learning levels of 6th-graders about the functions of the morpheme and the conjunction and its spelling were examined. In the resolution of this question, the pre-post test z scores obtained by the students from the "filling in the blank activity" regarding the function and spelling of the -de morpheme and the conjunction denominator were used. "Wilcoxon Signed Ranks Test" was used to test whether there is a significant difference between achievement scores before and after instructional activities. The data relating to this are given in Table 5.

Table 5. Pre-post Wilcoxon Signed Ranks Test Results in 6th-grade

Measurement	Pre-post test	N	Mean Rank	Sum of Ranks	Z	p
1de locative	Negative Ranks	1a	2.00	2.00	-2.625	.009
	Positive Ranks	9b	5.89	53.00		
	Ties	8c				
2de time	Negative Ranks	0d	.00	.00	-2.810	.005
	Positive Ranks	9e	5.00	45.00		
	Ties	9f				
3de case	Negative Ranks	1g	3.00	3.00	-1.342	.180
	Positive Ranks	4h	3.00	12.00		
	Ties	13i				
4. de conjunction	Negative Ranks	1j	9.50	9.50	-3.033	.002
·	Positive Ranks	15k	8.43	126.50		
	Ties	21				
Total	Negative Ranks	1m	9.00	9.00	-3.334	.001
	Positive Ranks	17n	9.53	162.00		
	Ties	0o				

In Table 5, 6th-grade students learning level z scores regarding the functions and spelling of de/de are given. It was determined that there was a significant and positive (z=-3.334; p<.001) difference according to the post-test scores of the students' learning levels related to the functions and spelling of de/de in general. This significant difference is in terms of locative (z=-2.625; p<.009), time-de (z=-2.810; p<.005) and conjunction (z=-3.033; p<.002) functions and spellings. is in favor. 6th-grade students did not make a significant and positive (z=-1.342; p<.180) improvement in their learning achievements related to the case function and spelling of -de. When the ordinal numbers of the students are examined, the situation of the students who improved positively out of 18 students is as follows: 9 students in learning locative function and spelling, 9 students in learning time function and spelling, 15 students in learning conjunction function and spelling, and 17 students in general improved. The effect size calculated for the application; is moderately effective for locative (d=-0.62), time (d=-0.66), and conjunction functions and spelling (d=-0.71) in -de. It has been determined that the application (d=-0.78) for all functions and writing of -de/de has a medium effect level. According to these results; it can be said that the experimental procedure applied was effective in learning the functions and spelling of -de/de, except for the case function and spelling -de.

Thirdly, the learning levels of 7th-graders about the functions of the morpheme and the conjunction and its spelling were examined. In the resolution of this question, the pre-post test z scores obtained by the students from the "filling in the blank" activity regarding the function and spelling of the conjunction de morpheme and conjunction were used. "Wilcoxon Signed Ranks Test" was used to test whether there is a significant difference between achievement scores before and after instructional activities. Related data are given in Table 6.

Table 6. Pre-post Wilcoxon Signed Ranks Test Results in 7th-grade

Measurement	Pre-post test	N	Mean Rank	Sum of Ranks	Z	р
1de locative	Negative Ranks	3a	3.50	10.50	-1.746	.081
	Positive Ranks	7b	6.36	44.50		
	Ties	9c				
2de time	Negative Ranks	19			728	.467
	Positive Ranks	3d	6.83	20.50		
	Ties	7e	4.93	34.50		
3de case	Negative Ranks	9f			378	.705
	Positive Ranks	19				
	Ties	2g	2.00	4.00		
4. de conjunction	Negative Ranks	2h	3.00	6.00	-3.731	.000
	Positive Ranks	15i				
	Ties	19				
Total	Negative Ranks	Oj	.00	.00	-3.502	.000
	Positive Ranks	18k	9.50	171.00		
	Ties	1				

In Table 6, the learning level z scores of 7th-grade students regarding the useful functions and spelling of -de/de are given. It has been determined that there is a significant and positive (z=-3.502; p<.000) difference according to the post-test scores of the students' learning levels related to the functions and spelling of -de/de in general. This significant difference was only in learning the conjunction (z=-3.731; p<.000) function and spelling; it was observed that there was no significant and positive development in other functions and writing. When the row numbers of the students are examined, the situation of the students who developed positively out of 19 students is as follows: 15 students showed improvement in learning the conjunction function, and 18 students in general practice. The effect size calculated for the application; also has a great effect (d=-0.85) on conjunction function and spelling. In addition, it was determined that the effect size for all functions and spelling of -de/de (d=-0.80) was at the large effect level. According to these results; 7th-grade students of the experimental procedure applied; Except for locative, time, and case functions and spelling, it can be said that de is effective in learning the conjunction function and spelling.

Finally, the learning levels of the 8th-grade students about the functions and spelling of the morpheme and conjunction were examined. In the resolution of this question, the pre-post test z scores obtained by the students from the "filling in the blank" activity regarding the function and spelling of the conjunction de morpheme and conjunction were used. "Wilcoxon Signed Ranks Test" was used to test whether there is a significant difference between achievement scores before and after instructional activities. Related data are given in Table 7.

Table 7. Pre-post Wilcoxon Signed Ranks Test Results in 8th-grade

Measurement	Pre-post test	N	Mean Rank	Sum of Ranks	Z	р
1de locative	Negative Ranks	1a	4.00	4.00	-2.654	.008
	Positive Ranks	10b	6.20	62.00		
	Ties	7c				
2de time	Negative Ranks	0d	.00	.00	-2.699	.007
	Positive Ranks	9e	5.00	45.00		
	Ties	9f				
3de case	Negative Ranks	3g	5.00	15.00	-1.387	.166
	Positive Ranks	7h	5.71	40.00		
	Ties	8i				
4. de conjunction	Negative Ranks	3j	9.00	27.00	-2.359	.018
	Positive Ranks	14k	9.00	126.00		
	Ties	11				
Total	Negative Ranks	3m	7.33	22.00	-2.767	.006
	Positive Ranks	15n	9.93	149.00		
	Ties	00				

In Table 7, 8th-grade students' learning level z scores related to the functions and spelling of de/de are given. It was determined that there was a significant and positive (z=-2.767; p<.006) difference according to the post-test scores of the students' learning levels related to the functions and spelling of -de/de in general. This significant difference is in locative (z=-2.654; p<.008), in time (z=-2.699; p<.007) and conjunction (z= -2.359; p<.018) functions and spellings. determined. 8th-grade students did not show any significant progress in learning the case (z=-1.387; p<.166) function and spelling of -de. When the ordinal numbers of the students are examined, the situation of the students who improved positively out of 18 students is as follows: 10 students in learning locative function and spelling, 9 students in learning time function and spelling, 14 students in learning conjunction function and spelling, and 15 students, in general, have improved positively. The effect size calculated for the application; -de for locative function and spelling (d=-0.62), -de for time function and spelling (d=-0.64), de conjunction function and spelling (d=-0.57), and -de/ It was determined that de was at a moderate effect level (d=-0.65) for all functions and spelling. According to these results, It can be said that the experimental procedure applied was effective in learning the functions and spelling of -de/de, except for the case of -de.

2. Findings and comments on the second sub-question: To solve this sub-question, the results of the content analysis of the opinions of Turkish teachers who applied the teaching activities prepared according to Functional Grammar were used. Content analysis results of teachers' views on this subject are as follows:

1) Being fun: According to the Turkish teachers who applied the teaching activities, the students enjoyed the listening activity, which was arranged as a fill-in-the-blank test, which was used as a pretest and post-test. In addition, the students found it easy and fun to listen selectively to find the -de/de on the texts throughout the teaching process. Finding the -de/des, which have different functions in the texts, by listening, and identifying their functions made the learning of the students fun. Example: "Students enjoyed listening activities (T1), It was fun for students to find -de/des by listening, then find their functions and try to make sense of them (T2), It was a remarkable and entertaining method (T3)."

- 2) Convenience: According to the teachers whose opinions were taken, the students did not have any foreignness or difficulty in writing the de/de, which has become a chronic spelling problem, thanks to the association of the teaching of de/de with basic language skills. Making the teaching of the subject intuited and text-based facilitated the teaching. Example: "Students did not have any difficulties because the teaching of the subject consisted of listening, reading, and writing (T3)."
- *3) Permanence:* According to the teachers, text-based teaching in the writing of -de/de according to its functions and teaching the spelling according to the meanings added by de/de provided permanent learning. In addition, associating teaching activities with basic language skills increased the permanence of the functions and writing of -de/de. Example: "I think that learning is permanent because they learn by grasping in terms of semantics (T1), focusing on the functional meanings given by -de/de during teaching created awareness in students (T4)."
- 4) Difficulty: According to the teachers, students had no difficulty in finding the locative and time functions of -de but had difficulty in distinguishing the functions of de that appeared in the conjunction task. In other words, the students had more difficulty in finding the conjunction function that they gained in the conjunction task, where -de was written adjoining while understanding the locative, time, and case functions more quickly. Example: "They had no difficulty in finding the locative and time functions (T2), they had difficulty in sensing the types of functions that De gains when it is a conjunction and when written separately. Especially successful students grasped this quickly, but other students lagged (T3)."
- 5) Recommendations: Teachers; stated that students enjoy listening to different purposes during the teaching process and that they like it. Therefore, such activities should be increased in teaching the functions and spelling of -de/de, especially teaching activities suitable for the functional approach for meaningful learning. The difference in emphasis in the pronunciation of adjacent -de's and separate written de's should be emphasized more in teaching. In addition, when the functions of -de/de start to repeat during teaching, teaching can be terminated because students can get bored when they write the same functions frequently. Example: "Students loved the listening sessions during the teaching. Therefore, it should be increased especially at the 5th-grade level (T1), The difference in emphasis in the pronunciation of the suffix -de and the conjunction de, can be highlighted more (T2), and I think that such functional approaches should be applied more frequently. However, we are experiencing difficulties because there is a time limit to prepare for the central exams (T4)."
- **3.** Findings and comments on the third sub-question: To solve this sub-question, the results of the content analysis of the opinions of the secondary school students in the study group were used. The results of the content analysis of the student's views on this subject are as follows:
- 1) Instructive: Secondary school students, who learned the functions and spelling of -de/de according to the teaching activities prepared according to Functional Grammar, found these activities instructive. The students liked that the teaching activities were associated with basic language skills and stated that they learned the subject during these activities. Example: "The activities brought by our Turkish teacher are instructive. It is also fun (5th-grade, S3), I think it was fun when appropriate, sometimes boring, but always instructive (7th-grade, S3), Finally, I have no difficulty in writing –de/da (8th-grade, S3), It was instructive, what we learned became more permanent (8th-grade, S4). "
- 2) Being fun: Students from all secondary school grade levels, who were interviewed, stated that their teaching activities for four weeks were fun. Example: "I think it was fun, instructive, and permanent (5th-grade, S3), We both have fun and learn. That's why I liked it (5th-grade, S5), I liked all of them, but the most enjoyable part was that we filled in the blanks on the paper from the listening text (7th-grade, S5)."
- *3) Persistence:* Secondary school students; He stated that what he learned through the teaching of the functions and spelling of -de/de was permanent and they did not forget what they learned. Students: He stated that active and permanent learning is provided because they use listening, reading,

speaking, and writing skills in teaching the functions and spelling of -de/de. During these teaching activities, permanence was ensured by revealing the semantic features following the Functional Grammar understanding in the teaching of the subject. Example: "I liked the activity of giving a story and finding the software and using of -de/de (6th-grade, S4), We learned it permanently without getting bored (7th-grade, S3), I had some difficulties, but it was permanent. I had some difficulties while writing, but I don't have any difficulties anymore (7th-grade, S4), It was instructive, what we learned became more permanent (8th-grade, S4)."

- 4) Active participation: The students whose opinions were taken observed that their other friends could also participate in the functions of -de/de and teaching writing activities. This situation, can be explained by the fact that teaching activities are text-based, associating them with basic language skills, prioritizing meaning, adopting an intuitive approach, and applying the principle of level suitability and difficulty from easy to difficult. Example: "My favorite feature was that it was fun. The reason for this is that most people in the class participate in this activity (5th-grade, S1), It is fun, we do something with the class (5th-grade, S4), It is fun, and it is told by playing or permanently in its narration, it is told by intuiting and writing a story about it. or I liked reading (6th-grade, T1), I liked reading stories and deducing the meanings of -de/das (6th-grade, T3), I liked doing it by listening (7th-grade, S1), An activity that everyone can do (8th-grade), S1)."
- 5) Convenience: Students from all grade levels, whose opinions were taken, stated that the teaching activities related to the functions and writing of -de/de were easy. Example: "It was most instructive, easy and permanent (5th-grade, S3), Fun, instructive, easy and permanent (6th-grade, S1), An activity that everyone can do (8th-grade, S1)."
- *6) Difficulty:* Only three 6th-grade students stated that they had difficulties in the functions and writing of de/de among the secondary school students whose opinions were taken. Example: "It was instructive and difficult (6th-grade, S3), It was fun and instructive, it was a little difficult for me. Some of them were confused (6th-grade, S4), It was a bit difficult, sometimes confused (6th-grade, S5)."

Discussion and Conclusion

Previous research on 5th-grade students about the writing of -de/de shows that students have problems in this regard (Hamzadayı & Çetinkaya, 2013; Uludağ & Yıldırım, 2016). Hamzadayı and Cetinkaya (2013) determined that 5th-grade students have a high error rate in adjacent or separate writing skills according to the different functions acquired by de/de in the text. In addition, the researchers found that the misspelling of -de/de continued despite the dictation practices. Uludağ and Yıldırım (2016) ranked 5-8th. In his research with 5th-grade students, it was determined that students were unsuccessful at a rate of 78.5% in writing de' separately in the conjunction task. Despite this, the researchers did not create the data for each grade level regarding the writing of de, and reached a general conclusion. Similarly, in this study, as a result of the implementation of the teaching activities prepared according to Functional Grammar, it was determined that there was no significant and positive difference in the learning levels of the 5th-grade students regarding the functions and spelling of -de/de in general. Accordingly, it can be said that the 5th-grade students are not at a level to comprehend the time and case functions and spelling of -de in the adverb task, the locative function, and spelling in the noun task. It can be stated that students cannot distinguish between these functions and their spelling. However, it was observed that there was a significant increase in the conjunction function and spelling success of de. In addition, the level of learning the conjunction function and spelling of the 5th-grade students is at the medium effect level. The students whose opinions were taken stated that the four-week teaching activities were instructive, easy, and fun. Teachers, on the other hand, stated that students showed great interest in listening activities among teaching activities. Therefore, they recommended increasing the listening activities, especially at the 5th-grade level. In this way, they emphasized that active participation in the lesson was ensured.

Previous research on 6th-grade students about the writing of -de/de shows that students have problems in this regard (Akkaya, 2013; Bayram & Erdemir, 2006; Karagül, 2010; Süğümlü, 2020; Uludağ & Yıldırım, 2016). Süğümlü (2020) determined that 6th-grade students often make spelling mistakes when writing de' separately in the conjunction task. Uludağ and Yıldırım (2016) ranked 5-8th. In his research with 5th-grade students, it was revealed that the students also wrote the conjunction incorrectly at a rate of 78.5%. Akkaya (2013) determined that 6th-grade students often misspelled de in the conjunction task. According to these results, it was seen that 6th-grade students often made mistakes in the functions and spelling of -de/de and they wrote de' adjacent and wrong in the conjunction function because they could not distinguish the functions of -de/de. Unlike previous studies, in this study, the functions and spelling success of 6th-grade students increased significantly. In addition to this positive result, 6th-grade students; it has been observed that there is a significant increase in the writing success of the locative, time, and the conjunction function of -de. Accordingly, 6th-grade students learned the locative function and spelling of -de in the noun task, and the case function and spelling in the adverb task; it can be said that they can comprehend the conjunction function and spelling of de in the conjunction task. However, there was no significant increase in the case function and spelling of -de. However, it can be said that 6th-grade students are not at a level to comprehend the case function and spelling of -de in the adverb task. Because according to the 6th-grade students who were interviewed, it is difficult to distinguish some functions of -de/de. This function, which is difficult according to the quantitative data of 6th-grade students, is the case function of -de. This situation can be explained by both the comprehension skills of the students, which are directly proportional to the age of the students, and the lack of spelling knowledge of the students. On the other hand, studies have shown that as the grade level increases, the writing success of -de/de increases (Bayram & Erdemir, 2006; Uludağ & Yıldırım, 2016). In this study, it was determined that 6th-grade students were more successful than 5th-grade students at the end of the application in the functions and writing of -de/de. Although the teachers stated that the teaching activities prepared according to Functional Grammar were easy and fun, they observed that especially their students had difficulty in distinguishing the conjunction function of de from other functions. Despite this, according to the teachers, the students understood the locative, time, and case functions where -de is written adjacent, more easily and quickly.

Previous research on 7th-grade students about the writing of -de/de shows that students have problems in this regard (Bayram & Erdemir, 2006; Karagül, 2010; Süğümlü, 2020; Uludağ & Yıldırım, 2016). Bayram and Erdemir (2006) also determined that 7th-grade students were unsuccessful in writing conjunctions. Similarly, Süğümlü (2020) 7th-grade students had problems in writing -de/de contiguous and separate according to their functions. According to the findings of these research, it has been seen that 7th grade students failed to write "-de/de" correctly based on their functions in the text. In this research, however, it was observed that the functions and spelling success of 7th grade students significantly improved. Besides that, it was determined that this significant difference was due to the 7th grade students' success regarding the spelling of the conjunction "de" and that there was a significant increase between the conjunction function and spelling of "de". Nevertheless, it can be said that there is no significant difference between the pre- and post-test since 7th grade students have already learnt and known the functions of "-de" concerning the place, time and its spelling. 18 out of 19 students have been detected to show positive development in the research. This has been evidenced by the fact that there is a significant and positive increase in learning the place and time functions and spelling of "-de" at 6th grade level. Added to this, there was a significant and positive difference in the function of conjunction "de" and its spelling at the end of the teaching activities. This can be interpreted as 7th grade students' being able to distinguish the conjunction function and spelling from other functions and acquire separate writing skills. However, at 7th grade level, it was observed that students were not able to learn the function and spelling of "-de". Except for the case function and spelling of "de/de", in line with 7th grade students' achievements in terms of the overall functions of "de/de" and spelling success, students stated that they found the teaching activities prepared based on Functional Grammar entertaining and had fun while learning. Moreover, students observed that they easily adapted to these teaching activities prepared in accordance with the sense method and in relation to the four basic language skills and that, thus, they and their friends were able to participate effectively in the lessons. According to the teachers who carried out teaching activities, the fact that the functions and spelling of "-de/de" was adopted in accordance with Functional Grammar and the spelling of "-de/de" was taught according to the meanings added by "-de/de" to the text ensured meaningful learning and promoted permanence instead of rote memorization.

Previous research students have shown that hey have difficulty on the spelling of "-de/de" of 8th grade (Karagül, 2010; Kırbaş, 2006; Oğuz, 2012; Uludağ & Yıldırım, 2016). Karagül (2010) found that 8th grade students made %30 error in the separate writing of "de" in the conjunction function. In the same vein, Kırbaş (2006) determined that 8th grade students failed to spell "-de/de" correctly based on their functions. Oğuz (2012) who conducted the most detailed study on this subject, revealed that 8th grade students failed to spell "-de/de" correctly and concluded that the teaching activities were not useful on this subject. Furthermore, this is the writing skills that 8th grade students fail to a greatest extent compared to other spelling rules. The findings have shown that 8th grade students still often commit mistakes regarding the functions and spelling of "-de/de" and do not acquire the ability to spell correctly. In this research, where the teaching activities prepared according to Functional Grammar were administered to resolve this problem, the functions and spelling success of "-de/de" of the students increased significantly. At the end of this research, 8th grade students made significant progress in the place, time and conjunction functions and spelling of "-de/de", yet there was no significant process in the case function and spelling of "-de". Accordingly, it can be said that 8th grade students can acquire the spelling skills of "-de" as a noun and "de" as an adverb with the conjunction function. Nonetheless, 8th grade students were observed to fail to learning the case function and spelling of "-de" as an adverb. Similarly, Uludağ and Yıldırım (2016) found that as the grade level increased, the error rate of students in the spelling of "-de/de" decreased. This may be said to be due to the increasing writing experiences of the 8 the grade students depending on the age and increase in their capacity to comprehend the subject. The findings obtained from teacher and student interviews correspond to these positive qualitative results. The students noted that they learnt the functions and spelling of "-de/de" during teaching activities prepared based on Functional Grammar. In addition, they found these activities and listening, which are associated with four basic language skills, easy and entertaining. Likewise, teachers also stated that selective listening during teaching activities prepared according to Functional Grammar were easy and entertaining. Furthermore, according to the teachers, thanks to the sense method used in teaching activities, students participated effectively in the lesson and, thus, permanent and meaningful learning was ensured concerning the functions and spelling of "-de/de". Given these findings, it can be said that Functional Grammar teaching provides more permanent learning since it prioritizes meaning and makes learning more attention-grabbing during teaching process. Therefore, teachers have requested and recommended increasing teaching activities in accordance with Functional Grammar. Teachers also demanded to be terminate when the functions of "-de/de" began to repeat since students often get tired of writing the same functions.

Suggestions

In the literature, it is seen that even the students of the faculty of education make mistakes in the functions and writing of -de/de (Karabuğa, 2011; Kemiksiz, 2020). Central exams are applied based on reading skills in Turkey (Akkaya, 2013) and therefore Turkish teachers' emphasis on measuring and evaluating reading skills and neglecting other language skills, especially writing skills, are effective in this (Karatay & Dilekçi, 2019). However, in this research, Functional Grammar principles have been adopted in teaching the functions and spelling of -de/de, which has become an insoluble problem from basic education to higher education. Thanks to the teaching activities prepared with this understanding, it has been determined that secondary school students are significantly successful in the functions and writing of -de/de in general. It has been observed that there is a significant and positive increase in all grade levels in learning the conjunction function and separate writing, especially in the conjunction task. However, it was determined that secondary school students were successful in learning locative in the noun task, time functions in the adverb task, and spelling. However, middle school students could not make progress in the case function and spelling of -de in the adverb task. Therefore, the adjacent spelling of -de in locative, time function; the teaching of separate writing in the conjunction function should be given from the 5th-grade. In this way, a functional teaching method will be used gradually in teaching the functions and spelling of -de/de. Thus, thanks to the functional teaching method that is enriched with four basic language skills and makes the student activities, the functions of -de/de and the teaching of its spelling can be made more permanent and more enjoyable.

References

- Akkaya, A. (2013). 6. Sınıf öğrencilerinin yazım yanlışları sıklığı ve yazım yanlışlarının nedenlerine ilişkin öğretmen görüşleri. *Turkish Studies International Periodical For The Languages, Literature and History of Turkish or Turkic, 8*(4), 33-52.
- Aksan, M. (1993). Dilbilimde işlevci-biçimci yaklaşım. Dilbilim Araştırmaları, 4, 189-200.
- Bayram, Y., & Erdemir, A. (2006). Amasya'daki ilköğretim ikinci kademe öğrencilerinin imla kurallarını kullanma düzeyleri üzerine bir değerlendirme. *Milli Eğitim*, *35*(171), 140-155.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2018). *Bilimsel araştırma yöntemleri* (5th ed.). Ankara: Pegem Akademi.
- TDK Sözlük. (2011). Büyük Türkçe sözlük. Ankara: Türk Dil Kurumu Yayınları.
- Can, Ö. (Ed.). (2018). Dilbilim kuramları, iki düzlem beş kuram. İstanbul: İthaki Yayınları.
- Cohen, J. (1988). *The analysis of variance. In statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum Associates.
- Creswell. J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Newbury Park: SAGE.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative and mixed methods approaches* (5th ed.). Los Angeles: SAGE.
- Çiçek, S., & Dolunay, S. K. (2021). Türkçede çatı kavramı, yönetme ve bağlama kuramına göre çatı öğretimi. *Ondokuz Mayis University Journal of Education Faculty*, 40 (2), 849-900. Retrieved from https://dergipark.org.tr/tr/pub/omuefd/issue/67364/997509
- Davey, L. (2009). The application of case study evaluations (T. Gökçek, Trans.). *Elemantry Education Online*, 8(2), 1-3.
- Dik, S. C. (1997). *The theory of functional grammar (Part I: The structure of the clause* (2nd ed., K. Hengeveld, Ed.). Berlin, New York: Mouton de Gruyter.
- Ediskun, H. (2017). Türk dilbilgisi (13th ed.). İstanbul: Remzi Kitabevi.
- Eggins, S. (2014). Introduction to sytemic functional grammar. New York London: Continuum.
- Ekinci Çelikpazu, E. (2012). *Dil bilgisi öğretiminde çatı kavramı ve bu kavramla ilgili yanılgılar* (Unpublished doctoral dissertation). Atatürk University, Erzurum.
- Firth, J. R. (1957). Papers in linguistics 1934-1951. London: Oxford University Press.
- Fontaine, L. (2003). A systemic functional introduction. Cambridge: Cambridge University Press.
- Gencan, T. N. (1979). Dil bilgisi (4th ed.). Ankara: TDK Yayınları.
- Halliday, M. A. K. (2004). *An introduction to functional grammar* (3rd ed). London, United Kingdom: Arnold.
- Hamzadayı, E., & Çetinkaya, G. (2013). Dikte uygulamalarının 5. sınıf öğrencilerinin yazım ve noktalama kurallarını uygulama becerilerine etkisi. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, *9*(3), 133-143. Retrieved from https://dergipark.org.tr/tr/pub/mersinefd/issue/17384/181655
- İmer, K., Kocaman, A., & Özsoy, A. S. (2011). *Dilbilim sözlüğü*. İstanbul: Boğaziçi Üniversitesi Yayınevi.
- Karabuğa, H. (2011). Türkçe öğretmeni adaylarının yazılı anlatım çalışmalarında noktalama işaretlerini ve yazım kurallarını kullanabilme düzeyleri (Unpublished master's thesis). Abant İzzet Baysal University, Bolu.
- Karagül, S. (2010). İlköğretim 6-8. sınıf öğrencilerinin Türkçe dersi öğretim programında belirtilen yazım ve noktalama kurallarını uygulayabilme düzeyi (Unpublished doctoral dissertation). Dokuz Eylül University, İzmir.
- Karatay, H., & Dilekçi, A. (2019). Türkçe öğretmenlerinin dil becerilerini ölçme ve değerlendirme yeterlikleri. *Milli Eğitim Dergisi*, *Temel Eğitim*, 48(1), 685-716. Retrieved from https://dergipark.org.tr/tr/pub/milliegitim/issue/51765/674598

- Kayabaşı, D. (2018). Üretici dilbilgisi. In A. Ö. Can (Ed.), *Dilbilim kuramları, iki düzlem beş kuram* (pp. 261-330). İstanbul: İthaki Yayınları.
- Kemiksiz, Ö. (2020). Öğretmen adaylarının yazılı anlatımlarındaki imla hataları. *Journal of Language Education and Research*, 6(1), 35-55. doi:10.31464/jlere.591822
- Kerimoğlu, C. (2016). Genel dilbilime giriş (3rd ed.). Ankara: Pegem Akademi.
- Kıran, Z., & Kıran, A. (2010). Dilbilime giriş (3rd ed.). Ankara: Seçkin Yayıncılık.
- Kırbaş, A. (2006). İlköğretim sekizinci sınıf öğrencilerinin yazılı anlatım becerilerinin değerlendirilmesi (Unpublished master's thesis). Atatürk University, Erzurum.
- Korkmaz, Z. (2017). Türkiye Türkçesi grameri şekil bilgisi (5th ed.). Ankara: Türk Dil Kurumu Yayınları.
- Larsen-Freeman, D. (2003). Teaching language: From grammar to grammaring. Kanada: Heinle & Heinle.
- Luraghi, S., & Parodi, C. (2008). Key terms in syntax and syntactic theory. New York: Continuum International Publishing Group.
- Martinet, A. (1998). İşlevsel genel dilbilim (B. Vardar, Trans.). İstanbul: Multilingual Yayınları.
- Matthiessen, C. M., & Halliday, M. A. K. (2009). *Systemic functional grammar: A first step into the theory.* Beijing: Higher Education Press.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE.
- Ministry of National Education. (2018). *Türkçe dersi öğretim programı* (*ilkokul ve ortaokul 1, 2, 3, 4, 5, 6, 7 ve 8. sınıflar*). Ankara: Millî Eğitim Bakanlığı.
- Oğuz, F. (2012). İlköğretim 8. sınıf öğrencilerinin yazım kurallarını uygulamadaki sorunları ve bunların nedenleri üzerine bir araştırma (Afyonkarahisar ili Bolvadin ilçesi örneği) (Unpublished master's thesis). Afyon Kocatepe University, Afyon.
- Rifat, M. (1990). Dilbilim ve göstergebilimin çağdaş kuramları. İstanbul: Düzlem Yayınları.
- Schaaik, G. V. (1998). İşlevsel dilbilgisi nedir?. Dilbilim Araştırmaları Dergisi, 9, 9-25.
- Süğümlü, Ü. (2020). Ortaokul öğrencilerinin yazma çalışmalarındaki yazım ve noktalama hatalarının belirlenmesi. *Ana Dili Eğitimi Dergisi*, *8*(2), 528-542. doi:10.16916/aded.706748
- Uludağ, E., & Yıldırım, D. (2016). Ortaokul öğrencilerinin bazı noktalama işaretlerini ve yazım kurallarını uygulayabilme düzeyleri (İstanbul örneği). *Erzincan Üniversitesi Eğitim Fakültesi Dergisi,* 18(1), 319-342. doi:10.17556/jef.72765
- Vardar, B. (2007). Açıklamalı dilbilim terimleri sözlüğü (2nd ed.). İstanbul: Multilingual Yayınları.
- Yıldırım, A., & Şimşek, H. (2008). Sosyal bilimlerde nitel araştırma yöntemleri (7th ed.). Ankara: Seçkin Yayıncılık.
- Yozgat, U. (2018). Dilbilimde biçimci ve işlevci düzlem. In A. Ö. Can (Ed.), *Dilbilim kuramları iki düzlem beş kuram* (pp. 154-212). İstanbul: İthaki Yayınları.