Sofia University "St. Kliment Ohridski"

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ABSTRACT

of the dissertation on the topic:

Optimizing English language teaching of students with mild mental retardation in elementary school age

for acquisition of PhD educational and scientific degree Professional direction: 1.2. Pedagogy / Special pedagogy /

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Introduction

The relevance of the problem of English language training of students with various special educational needs is determined by the globalization process and the associated increase in political, economic, social and cultural interactions between the different countries in the postmodern context. In this regard, experts face the challenge of facilitating the interaction between different cultures for the purpose of implementing, on the one hand, successful intercultural dialogue and on the other, new conditions for the full realization of the individual in the changed conditions of the 21st century.

Key aspect of the implementation of intercultural dialogue is communication, and it would be impossible without the good command of the languages of participants in a given intercultural interaction, or proficiency in another language that all participants know equally well. This is the most concerned with the English language, which has long been not only characterized by English-speaking countries, but has acquired the functions of a global language that unites all people in the world.

Therefore, one of the main issues in the English language learning methodology is to offer new, more effective forms of learning in order to faster and hassle-free language absorption, the basis for the successful realization of the individual in the global world. This process is of particular importance in the context of teaching children with special educational needs, and in particular of students with mild mental retardation. The specific learning difficulties of these children also require finding new approaches in the realization of the learning process with them.

In view of this, the dissertation aims to offer a specific technology for the implementation of the English language learning process in 4th grade. It contains, on the one hand, suggestions for more effective ways of forming communicative skills, and on the other, new models for transforming the curriculum in order to make it easier to be absorbed by students with mild mental retardation. The present work shows that finding the most optimal approach to forming communicative competences is a complex process and to achieve the desired results is necessary to know the specifics of students with mild mental retardation, as well as reporting their age characteristics. Of course, the personality of the teacher, his positive attitude, patience and a creative approach in training is of great importance.

The subject of the study is to optimize the work with English text when teaching students with mild mental retardation in fourth grade.

1.Theoretical and practical aspects of education of students with mild mental retardation

The theoretical aspects of the education of students with mild mental retardation involved in the first chapter affect, on the one hand, the development of the terminological apparatus describing the particular group of students, and on the other, the principles of planning the training process in general by children with mild mental retardation.

Despite the variety of terms today, the term special educational needs (SEN) is most widely used in the scientific literature, which also includes children with mild mental retardation. The specific characteristics of this group are detailed by clarifying the boundary between norm and pathology and the related differentiation of individual subgroups.

In 1987, according to the tenth revision of the International Classification of Diseases (ICD-10), important adjustments were made in the value of IQ in the modern four-stage classification. The modern classification acquires the following type: Class 311. Mild mental retardation - IQ = 50 - 69 class 312. Moderate mental retardation - IQ = 35 - 49 class 313. Moderate mental retardation - IQ = 20 - 34 class 314. Deep mental retardation IQ = Under 20.

Recently, it is necessary to understand that the difficulties of individuals with mild mental retardation "are closer to those of people with normal intelligence than to the specific problems of individuals with moderate and deep mental retardation." (Zamfirov 2020: 42-43).

Modern science determines the specifics of children with mild mental retardation in the context of their difficulties in basic cognitive operations: comparison, summary, analysis, synthesis in the process of forming concepts. These difficulties also determine the lack of opportunities for independently detecting causal dependencies in the course of tracking a particular event or phenomena; The difficult transfer of acquired knowledge and skills to new conditions and in new requirements.

The above characteristics of children with mild mental retardation make it difficult to develop both the oral and written speech, e.g. disclosure of the meaning of what has been read, reproducing it, and drawing up an independent oral exposition on the subject.

However, it has been found that with the right selection of methods and conditions for learning, the brain has the ability to reorganize. Discoveries in the field of neuroplasty

prove the brain's natural ability to change throughout life - to form new connections and to generate new brain cells in response to experience and learned. These new links help to acquire skills such as reading and writing, which have been difficult when using the old connections.

All these discoveries necessitate the following of certain **principles even when planning the training process.**

The first principle is the teacher's personal attitude that the child wants and can study.

The second principle is to pre-analyze the factors that can motivate students with mild mental retardation to successfully participate in the learning process. It is also important for the child to be able to see the path to their success, ie. be aware of the stages of its activity in advance and the expected result of it.

Very significant in working with this particular group is the third principle- setting a measurable and meaningful purpose for the child related to tasks that meet his or her real skills so far.

Last, but not least, is the principle that the student's activity is achievable and with maximum conditions for success.

The practical aspects of the education of students with mild mental retardation presented in the first chapter are related to the implementation of the most successful methodological strategies and approaches to integrate these students into the learning process.

The first step in providing optimal training conditions refers to the organization of the lesson. During the lesson it is necessary to clearly present the training procedures: the variety of study materials, a clear presentation of the instructions, an understandable explanation of the forms of feedback.

The second step is to simplify the study materials. It is appropriate for students with mild mental retardation to give a separate sheet with a limited number of stimuli to work on, and the most essential is emphasized. (Nijakovska 2013).

The third step refers to the organization of students, which takes into account the fact that this group needs more time for a certain type of activities.

In fourth place, special attention should be paid to additional support for students with mild mental retardation.

The fifth step to integrate students with mild mental retardation into the learning process is the individual work with them.

In the dissertation work, we accept Raid's thesis for the three stages of the training process (introductory stage, stage of formation of competencies and final stage) and the relevant strategies of each of them. In the initial stage, the main strategy is to present learning information in small "portions". At the stage of formation of competencies for children with mild mental retardation, it is especially important that the information be submitted understandably; the new information to relate to the previous knowledge; to monitor the perception and to evaluate the new material periodically. At the final stage, it is advisable to work on a summary of text, as well as the text structure in general.

The effectiveness of the strategies applied is largely determined by the properly selected **methodological approaches** in the training of the particular students group.

The multisensory approach has been proven effective and useful for all students, but it is particularly important for children with mild mental retardation. If more senses are involved, their cognitive deficits can be compensated. In general, the biggest advantages of the multisensory approach are that this approach is carefully structured, cumulative, detailed explaining linguistic structures, training and teaching strategies.

An important place in the education of students with mild mental retardation is also *the method of total physical response*, which is actually a method of supporting physical actions. The most important positive aspect of this method is to follow the principle of learning in the mother tongue based on reproductive activities. (Homolova 2012: 45-46). The learners reproduce certain language elements until they are ready for self-verbal production.

Particularly attractive to students in the initial stage of education is *the game approach*. The game can be used to achieve different purposes: to master and solidify the new vocabulary, to automate language structures, to form and develop various communication skills. Focusing students' attention on the result of the game takes the usual tension that accompanies the learning process.

2. Working with text in foreign language education of students with mild mental retardation

Second chapter addresses three basic theoretical questions:

- the role of the text in the formation of functional literacy;
- the role of the text in the construction of communicative competence;

- Training difficulties when working with a text in a foreign language.

Based on the analysis of the theoretical issues presented, a model for working with an English language learning text is offered for students with mild mental retardation.

2.1. Characteristics of the text

The text as a result of speech activity characterizes the linguistic capacity in general of each carrier of the language. When real speech communication takes place, communication is realized in a certain discourse, not through text. Because, as is well known, discourse is actually the speech realization of the text. A secondary text is formed in the processes of understanding and perception. That is, the result of these processes is a kind of projection of the primary text, which depends on the specifics of the perceiver. In this sense, the formation of the concept of each text, ie. its main sense has most often an extraordinary nature.

The role of the text becomes the center of scientific interest in the emergence of text linguistics as an independent science, which defines the following key positions:

- 1. "The text is a basic unit of speech in the form of a complete statement with a communication purpose.
- 2. The texts as specific speech works are created according to general rules that apply to the language system, but not to speech.
- 3. Text has a sign character similar to each language unit. "(Stefanova, 2018).

In view of these positions, Dobreva and Savova (Dobreva, Savova 2004: 115-117) classify the texts according to the dominant type of over sentence units: narrative, descriptive, argumentative and appellate.

It is obvious that the said classification perceives the text as a product of the written discourse. By accepting this understanding, we turn our attention to narrative and descriptive texts in English language educational systems for elementary school students. It turns out that in the first and second grade texts of similar nature are missing.

2.2. The role of the text in the formation of functional literacy

The education of children with mild mental retardation puts a lot of challenges and tasks, one of the most important of which is the training for perception, understanding and reproduction of speech messages, the basis of functional literacy. The importance of this process is determined by the fact that the ability to perceive and comprehend

information to the greatest extent is related to the success of students in general. This applies to the acquisition of knowledge in all subjects, which is seriously dependent on the understanding of the teacher's explanations and the teaching material. In his sense, achieving the learning goals in general, is largely related to the formed skills for understanding and reproducing lips and written texts.

2.3. The role of the text in building communicative competence

Forming such skills is a complex task arising from the diverse nature of the text in general. The text as a result of speech activity characterizes the linguistic capacity in general of each carrier of the language. The multilayered nature of the text also determines the complex process for its perception and reflection. The ability to perceive, comprehend and reproduce text is directly related to the construction of communicative competence in students, including students with mild mental retardation. As noted in the General European Language Framework, the communicative linguistic competence "is based not only on knowledge of the language system, but also of cognitive organization and the way in which this knowledge, on the one hand, can be preserved in the memory of the trainee, and on the other, to activate and appropriately use. In this sense, the cognitive organization of vocabulary, the accumulation and automation of linguistic structures largely depends on both the individual characteristics of the student and the methodological organization of the lesson. "(GELF 2006: 21).

The essential role of the curriculum in the foreign language education of children with mild mental retardation necessitates the need to find the right ways and means of forming habits for understanding and processing the text, as well as for the self - construction of text by students.

2.4. Training difficulties when working with text in a foreign language

To a large extent, the adequacy of these ways and means is related to overcoming the basic learning difficulties when working with text in a foreign language. As for the difficulties of children with mild mental retardation when working with text, these problems are manifested in tasks related to: comprehension of the basic thought, defining keywords, reconstructing the text and reproducing the source text. The typology of basic learning difficulties can be presented as follows:

- "A. Insufficient design of the habit of indicating text messaging
- B. Narrowing the boundaries of what is understood in the text

- C. Violation of superficial (formal) and in-depth (logic-meaning) links between the parts of the text (low level of awareness of the logical structure).
- D. Low level of analysis of structural-meaning content: difficulties in determining the main thought; inability to determine the support words;
- E. Difficulty in reproducing the text related to its understanding " (Stroganova 1998: 10)

The observations made largely determine the basic educational and methodological activities that would optimize the perception of text in a foreign language by children with mild mental retardation.

It is important that every lesson starts with an introductory part. The main purpose of this stage is to update students' knowledge of the concepts they will encounter in the text.

The work of semantisation of keywords is essential for the proper perception of the text. The execution of more tasks related to the main information elements in the text largely facilitates the process of thinking of children with mild mental retardation.

For students with mild mental retardation, it is imperative that the text be read and thought about in parts. After each part, tasks are set to determine the degree of understanding. This principle of work is also determined by the initial degree of mastering the language for this group.

Given the above-mentioned difficulties of students with mild mental retardation, it is imperative to discover new didactic models to optimize the work of these students with an English text.

- 3. Production / Set-up of the experiment
- 3.1. Goals, tasks and hypothesis of the study

Purpose of the study:

To offer an innovative didactic technology to optimize the work with a narrative learning text in English in the education of students with mild mental retardation in fourth grade.

Tasks:

1. Theoretical clarification of the specific learning difficulties of students with mild mental retardation in the context of the general learning difficulties of students with SEN.

- 2. Conduct an analysis of modern approaches used in the foreign language education of students with SEN.
- 3. Selection of texts from English language training systems for 4th grade, approved by the Ministry of Education and Science.
- 4. Establishing the basic difficulties of students with mild mental retardation in fourth grade when working with a learning text in English.
- 5. Development of methodological progression for working with an English language learning text when training children with mild mental retardation in fourth grade.
- 6. Developing additional exercises for the selected texts for the formation of reading skills and for self-speech production.
- 7. Conducting an experiment to identify the basic difficulties of students with mild mental retardation when working with text in English.
- 8. Conducting an experiment with students with mild mental retardation for the application of the developed methodological model.
- 9. Analysis of the results of the experiments.

Hypothesis:

If the offered methodological model and the relevant language exercises are applied to the English language training of students with mild mental retardation, then a positive effect on the training of children with mild mental retardation can be expected, such as: more durable absorption of the active vocabulary, of the key for the text language structures, as well as improving reading skills with understanding and self-speech production.

3.2. Research contingent

The study included a group of 40 students with mild mental retardation from fourth grade: 20 students from resource centers in Sofia and Pazardzhik.

All students are trained in general education schools and attend the resource centers for additional preparation in the acquisition and consolidation of knowledge.

As it has already been noted, the main purpose of the study is to identify the learning difficulties of the target group of students under consideration when working with a learning text in English. To achieve maximum objectivity of the results, the students worked with two different texts, in view of which they were differentiated into 2

subgroups, conditionally called Group1 and Group2, each of whom includes 10 students from Sofia and 10 students from Pazardzhik.

9 boys and 11 girls participate in the subgroup 1, respectively 45 % boys and 55 % girls.

12 boys and 8 girls participate in the subgroup 2, respectively 60% boys and 40% girls.

Група 1							Група 2						
grad место	живеенеа						grad место	живеенеа					
		Frequency	Percent	Valid Percent	Cumulative P	ercent			Frequency	Percent	Valid Percent	Cumulative P	ercent/
Valid	1 София	10	50.0	50.0	50.0		Valid	1 София	10	50.0	50.0	50.0	
	2 Пазарджи	10	50.0	50.0	100.0			2 Пазарджи	10	50.0	50.0	100.0	
	Total	20	100.0	100.0				Total	20	100.0	100.0		
a group rpy	пи по експерим	ленти = 1.00 гр	рупа 1				a group rpy	ли по експерил	иенти = 2.00 г	рупа 2			
pol пола							pol пола						
		Frequency	Percent	Valid Percent	Cumulative P	ercent			Frequency	Percent	Valid Percent	Cumulative P	ercent
Valid	1 момче	9	45.0	45.0	45.0		Valid	1 момче	12	60.0	60.0	60.0	
	2 момиче	11	55.0	55.0	100.0			2 момиче	8	40.0	40.0	100.0	
	Total	20	100.0	100.0				Total	20	100.0	100.0		
a group гру	пи по експерил	ленти = 1.00 гр	рупа 1				a group гру	пи по експерил	иенти = 2.00 г	рупа 2			

3.3. Methodology and procedure of the study

The following methods were used when conducting the experiment:

- observation;
- diagnostic conversation;
- didactic experiment;
- Statistical methods for presenting the results of empirical data.

3.3.1. Teaching resources

For conducting the study, such teaching texts have been selected in advance, which meet all English language training requirements in the 4th grade provided in the relevant curriculum, which "is intended for achieving level A1 under the General European Language Framework at the end of the initial Stage of the basic degree of education. The thematic areas, language tools and speech activities in the program are oriented towards the interests, age and experience of students and follow the spiral principle, which allows repeatability, for gradual expansion and deepening of knowledge, skills and competences and applies to each subsequent class and stage of training. "(https://www.mon.bg/en/2190)

The two texts used in the experiment are Amazing Mammals and Reptiles and A Day in the Life. Both texts are from thematic areas suitable for fourth grade training. The texts have the same volume. The Amazing Mammals and Reptiles text consists of 97 words, and the text A Day in the Life is 99 words.

3.3.2 Processing of the study

The study procedure includes three stages:

- Assertive
- Training
- Conclusive.

3.3.3. Assertive Experiment

The finding stage includes working with Amazing Mammals and Reptiles and A Day in the Life) by the Tiger Time system, approved by the MES for English language training in the 4th grade, according to the methodological algorithm presented in the Teacher's Book:

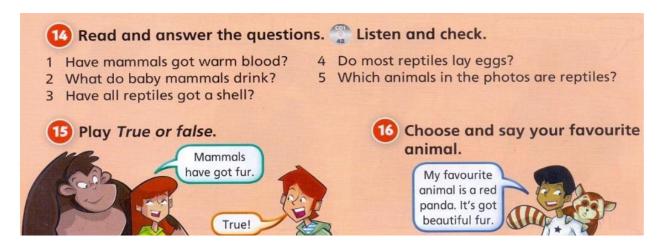
The purpose at this stage is, observing the methodological progression established in the Teacher's book, to determine the level of skills of fourth-graders with mild mental retardation for:

- perceiving an unfamiliar text
- global understanding of the text
- detailed understanding of the text
- producing an exhibition on the topic presented.

First text Amazing Mammals and Reptiles

The model of the text proposed in the system Tiger Time for the fourth grade consists in the implementation of the instructions on the text given in the textbook:

- listening to the text
- reading by two students
- answer the questions given after the text.
- student's story about a beloved animal.



Lesson course

Introduction part – The main topic of the text was presented in Bulgarian, namely the two large groups of animals: mammals and reptiles.

Listening to the text recording.

Reading the whole text by a student.

Semantisation of the new words from the teacher-through:

- Visualization of meaning with the photographs in the textbook
- Translation method of the new words

Language exercises

This phase of working with the text is implemented in several stages:

- answer the questions in exercise 14 of the textbook
- exercise 14 in the workbook which requires yes/no answers
- oral execution of task 15 of the textbook related to the construction of a claim by the teacher and a response from a student with "Yes/ No"- TRUE/ FALSE
- answering questions about the content of the text
- constructing questions on the content of the text
- self-statement on the topic: Your Favorite Animal.

When all of the students execute exercise 14 of the textbook, the independent answer to the questions was very difficult. Therefore, every question needed guidance

explanations. With the exception of the first question, for all others was indicated the specific part of the text that contains the correct answer.

In these circumstances, the following results were as shown.

On the first question, "Have Mammals Got Warm Blood?" 4 students answered correctly with "yes", 16 students answered wrong - "no".

On the second question, "What do Baby Mammals Drink?" 3 students answered correctly and 17 gave the wrong answers.

On the third question, "Have All Reptiles Got a Shell" 3 students answered correctly, and 17-wrong.

On the fourth question, "Do most reptiles Lay Eggs" 4 students answered correctly and 16-wrong.

The most complicated question is the fifth question "Which Animals in the Photos Are Reptiles?" Its correct answer is directly related to the awareness of the specifics of the two animal groups considered. The correct answer to the question includes the names of 3 animals. 2 students gave a completely correct answer. 4 students gave a partially correct answer, indicating 1 or two of these animals. 14 students have given a completely wrong answer.

Task 15, as mentioned above, consists in constructing a claim by the text by the teacher and the response of the student true/ false.

The first statement was: Mammals have got a shell. Only 2 students gave a correct answer and 18- wrong.

The second statement, designed by the teacher, was" Reptiles have got cold blood "with a correct answer Yes. A correct answer was given by 4 students and 16 - wrong.

The third statement was "The Chameleon has got gray fur " with a correct answer False. 3 people responded true, 17- wrong.

The fourth claim of the teacher was "The marmoset is a kind of monkey "with a correct answer TRUE. 5 students responded correctly, and 15-wrong

The fifth claim on this task was "The star tortoise has got a long tail "with a correct answer False. 2 people gave a correct answer, 18-wrong.

Task 16 is to check the skill for oral presentation on the subject of the text. The statement is a description of a favorite animal that consists of at least 2 sentences.

From the participants in the experiment, no one managed to produce a complete description. 3 students made an incomplete description only with the name of the animal. 17 students were not able to handle the task.

Second text A DAY IN THE LIFE- related to the student's daily routine.

Following this text, only one task is provided in the textbook related to each student's independent story about his or her own daily routine.

The assertive experiment, in this case, includes the following components:

- 1. Work with the text:
- reading
- performance of the tasks after the text in the textbook;
- 2. Statistic analysis of the results obtained.

Lesson course

Introductory part

The trainee explains at the beginning in Bulgarian the topic of the lesson. He then asks questions about the student's everyday life. It is noteworthy that although these problems have been studied by students, the right answers are received only to the first question What's your name?

Listening to the text. Reading by a student.

Repeating the meanings of the main structures:

get up, have breakfast, go to school, have break, have lunch, go home, do my homework, play on my computer.

Questions about understanding the text.

Linguistic tasks

Task 19 of the textbook-independent statement on certain issues.

Task 19 of the textbook

On the first question of the task, "Your Name and Where You Live", none of the students managed to design a description on both parts of the question. 10 students answered only the first part of the question - to present themselves. 10 students failed to cope.

On the second question "Your Daily School Routine", no student was able to make a complete description of his daily routine. 9 students described one, two activities of their daily lives, and 11 students failed to cope at all

On the third question "What You Do After School", none of the participants in the experiment was able to draw up a description involving 3 or 4 activities. 14 students have drawn up a description of 2 activities, 6 students- from 1 activity and 6 students did not manage.

3.3.4. Develop an innovative didactic technology to work with text

Given the above-mentioned difficulties of students with mild mental retardation, a model was developed to optimize the work of these students with a fourth-grade English text. The model is fully based on the understanding, reflected in the General European Language Framework, that the main techniques for learning a foreign language by working with text are:

a/ familiarization with the text

b/ familiarization with the text, such as understanding ... is guaranteed through conclusions from the verbal context, illustrative material, and more.

c/ acquaintance with the text, with understanding being accompanied by questions and answers, multiple answer questions, comparing text with a picture, etc.

d/ as in B/ but with the inclusion of explanations in the native language, as well as activities preceding reading "(GELF 2006: 177)

The model includes eight items:

- Work on entry into the content of the text
- Work on individual semantic parts/paragraphs
- Working with support words/expressions
- Work on schemes
- Work on a meaningful "shrink" of the text
- Work on building a connected text
- Work on "scaffolding"
- Work on forming an oral presentation skill.

Comprehending the text begins by asking preliminary questions before reading and continues with questions that arise in the course of the read. In this case, the focus is on the thought of predicting information, which is largely facilitated by visualizing the content of the text with pictures.

The work on the text continues by consistently perceiving the individual semantic parts, as the tasks that relate to a separate paragraph set less memory requirements. (GELF 2006: 203) Thus, in fact, the principle of fragmenting (Chunking) the information provided for absorption is realized in order to optimize the training process. The main method when working with text, in general, is the method of detecting support words/expressions. Suitable for the group under consideration are tasks: coloring the support words in the text, connecting a word with a picture, and putting the support expression in a suitable place in a sentence.

At each stage of working with the text, it is advisable to apply and visualize information through schemes. In this case, when working with students with mild mental retardation, the creation of schemes is a useful model for both the perception of the content and for the self-expression of the students. Work on keywords in the text and schemes reflecting their interconnection is at the heart of the so-called meaningful "shrinking" of the text. The compression of the text is actually a highlight of the basic in its information structure and the creation of a kind of summary of the text. The "shrinking" of the content of the text is the result of the ability to transmit the contents of the read shorter, separating the main, essential.

The basic principle of processing the text in education, especially of students with mild mental retardation, follows the elements of the word-sentence-text trichotomy. After learning a new lexical unit, it is necessarily represented by a frequency syntactic structure in which it functions and, of course, corresponds to the content of the text that is studied. The tasks set are aimed at maximizing the automation of syntactic structures, which allows the student to use them in the later stage.

Due to the specifics of students with mild mental retardation, an exceptional role in the successful learning process is played by the trainer who creates support models for working with the text. This approach to constructing learning experience with the help of the teacher is the so-called *scaffolding*.

One of the main educational goals in general when working with text in foreign language education is the formation of the oral presentation skill on the subject. In the dissertation, models of basic groups of exercise (Piefo 1987) are presented for the formation of speech production:

- exercises to prepare the communication (for semantization of vocabulary, to emphasize and color keywords/ expressions);
- exercises for building communication (filling a word in a sentence by replacing a picture; filling up an expression);
- exercises to structure communication (eg, arranging sentences in a logical sequence);
- exercises to simulate communication (eg reproduction of dialogue).

The practical implementation of the presented model for working with a learning text in English includes three main stages:

- Introduction to the text
- Working on paragraphs
- Speech production.

Working on each paragraph includes five main phases:

1. Presentation- the text is read in parts: from a teacher and then by the student.

After reading each part, the phases presented below are performed.

- 2. Extract the basic information from each paragraph (cursor reading) through:
- detection and marking of keywords through coloring, highlighting, etc.
- visualizing the semantics of keywords/ expressions
- exercises to automate keywords/ expressions
- 3. Exercises to structure sentences filling words in a sentence by replacing the visual stimulus with a graphic sign
- 4. Information synthesis exercises:
- Filling a scheme
- Filling a table
- Arranging sentences
- 5. Questions about understanding the text.

3.3.5. Training experiment

At this stage, the students were familiar with the new language tasks created by the corresponding texts. Work was conducted on parts of the texts, which follows the developed didactic technology and involved the performance of the created new language tasks, tailored to the specifics of the target group.

As noted, work on the individual parts of the text is based on the offered innovative didactic technology in order to facilitate students with mild mental retardation when perceiving text in a foreign language.

Therefore, the technology was implemented by one of the parts of the respective teaching text.

Subgroup 1 works with the same text - Amazing Mammals and Reptiles from the Tiger Time for Bulgaria for the 4th Grade system.

The first paragraph of the text was selected.



Working on the first part of the text followed these steps.

Introductory part

Work started with an introduction from the teacher:

"Today we will get acquainted with different species of animals. Let's see the first picture. Do you know this animal?"

The teacher presented the animal in English, after which the student was tasked to repeat the sentence, e.g.

"This is a Monkey"

A. Introduction

The paragraph is read by the trainer, with students being instructed to follow the text in the textbook. This largely contributes to the concentration of students' attention and creates an atmosphere of teamwork.

B. Extract basic information

The students were instructed to find the word mammals in this part of the text and to color it in red - to emphasize their attention on the keyword.

The trainer asks a common question such as "What is this Text About?", Related to the cursory reading skill. After a brief explanation in Bulgarian, a summary was made by the trainer: So, The Text Is About Mammals.

At this stage, as well as at all other stages of working with the text, before putting a particular question, students perform preparatory exercises that will facilitate the further understanding of the questions.

In this case, the preparatory exercise consists in visualizing the meaning of some lexemes with 4 paintings, representing the main characteristics of the mammals under which the respective word is written:



C. Structuring sentences

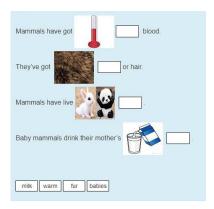
At this stage, work with the already acquired lexical units, but at a higher level, namely through tasks for their inclusion in sentences, continued.

For students with mild mental retardation, these exercises are simplified, and a word is accompanied by a visualization of its meaning. Thus the student's attention is directed to only one element of syntactic

structure, not to the whole structure, as it works with students who have intelligence in the norm.

Therefore, after learning the support words in this part of the text, a task is offered to fill them in sentences by replacing paintings depicting the lexical semantics.

The task aroused the interest of students because of their visual attractiveness.



Upon completion of the process of filling the words, a task was set to self-reading sentences: READ, PLEASE!

D. Synthesis of Information

After completing the previous tasks, the teacher summarized the monkey's characteristics. He pointed to the picture of the monkey by repeating its name in English. Then he turned the students' attention to the previous task and summarized:

"The monkey is a mammal. It has got warm blood. It has got fur. It has live babies. Baby monkeys drink their mother's milk."

The students then repeated the summary.

E. Verification of Understanding

After the performance of all these exercises, the students were asked only the first two questions from the textbook in exercise 14, which relate to the matching part of the text:

- "Have mammals got warm blood?"
- "What do baby mammals drink?"

Subgroup 2 works with the same text from the assertive experiment - "A day in the life" from the Tiger Time for Bulgaria for the 4th Grade system.

The first paragraph of the text was selected again, following the same steps on it.

3.3.6. Conclusive experiment

The work on the texts is realized through 3 main phases:

- Introduction
- Working on micro texts

- Exposition by support model

Working on each micro text has the following structure:

- 1. Presentation
- 2. Extract the basic information
- 3. Exercises to structure sentences
- 4. Information synthesis exercises
- 5. Questions about understanding the text
- 6. Presentation by reproducing the exact model.

In addition to the worksheets, electronic study resources have been created for the purpose of the experiment, **a total of 23**.

These include electronic tasks of Drag and Drop and Multiple Choice, electronic circuits and electronic visualizations.

All electronic exercises can be found on the page:

https://bg.e-learning-deo.uni-sofia.bg/course/view.php?id=154 with a personal code for access.

The first text **Amazing mammals and reptiles** was worked by the 20 students who took part in the finding stage of the experiment on the text **A day in the life**. In other words, this is a new text for them, which is perceived by the suggested in the dissertation model.

That is why here we offer the following structure of the process of perception and comprehension of the text.

1. Introducing part

The work began with an introduction from the teacher in Bulgarian of the paintings.

2. Working on micro texts

First part

A. Exposition

The first paragraph is read by the teacher, with students being instructed to follow the text in the textbook.

B. Extract basic information

The students were instructed to find the word mammals in this part of the text and to color it in red - to emphasize their attention on the keyword. A question was asked "What is this Text About?" As the teacher referred to the colored word.

Semantization of the noun through a situation.

To facilitate the perception of the contents of the first part, a preparatory exercise is made - visualizing the meaning of some lexemes with 4 paintings presenting the main characteristics of the mammals under which the respective word is written: fur, warm, babies, milk.

When conducting the experiment with a group of students, the exercise was implemented as a game "Guess the word".

After learning the words, the game "Show the picture" was proposed. The teacher pronounces a word in English, and the student shows the picture. In fact, this type of exercise contributes significantly to the automation of lexemes.

C. Structuring sentences

At this stage, work with the already acquired lexical units, but at a higher level, namely through tasks for their inclusion in sentences, continued.

The first task was to fill the keywords in sentences by replacing paintings depicting lexical semantics. The result of their work was also particularly positive- 8 of them were able to do the task.

Upon completion of the process of filling the words, a task was set to self-reading sentences:

In other words, the basic principle of working with the first micro text (paragraph) is a constant return to repeated words and syntactic structures by performing a variety of tasks on them.

D. Synthesis of Information

At this stage, the teacher summarized the characteristics of the monkey, whose picture the students had already considered as a representative of the mammals:

"The monkey is a mammal. It has got warm blood. It has got fur. It has live babies. Baby monkeys drink their mother's milk."

The students then repeated the summary.

E. Verification of Understanding

After executing all these exercises, the students were asked only the first two questions from exercise 14, which refer to the relevant part of the text: "Have mammals got warm blood?" and "What do baby mammals drink?"

In the same model, the work was conducted with the next paragraph in the text.

Second part

A. Presentation

In the beginning, the teacher read the paragraph, then a common question in English and in Bulgarian was asked:

"What is this part of the Text About?" What is being talked about here?

B. Extract the basic information

The students were instructed to find the word reptiles in this part of the text and to color it in blue. In order to systematize the main features of these particular animal species, 4 paintings were presented to the students, which visualize these features. After learning the words, the game "Guess the picture" was held. The teacher pronounces one word, and the student shows the picture. Here are the results shown by the students - 10 of them did not make mistakes in pointing to the correct picture.

C. Structuring sentences

Once the support lexical units were updated in the students' minds, the next task was to fill in sentences with the appropriate word that was visualized with a picture.

After performing the exercise, each of the sentences is read aloud from the student.

D. Synthesis of Information

The teacher summarized the characteristics of the snake, whose painting students had already seen as a representative of the reptiles. The summary was presented in the following form: "The snake is a reptile. It has got cold blood. It has got dry skin or scales. It lays eggs "

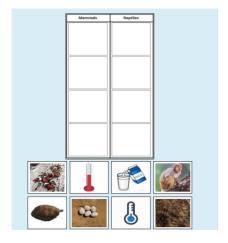
The students then repeated the summary.

After working on the two parts of the text, we moved to an exercise to compare the two groups of animals by appropriate visual stimulus. The exercise is realized in the form of a "Select the box" game. The teacher provided flashcards with images studied here. 2 small boxes were prepared in advance- one with the inscription "Mammals" and the

other- "Reptiles". To facilitate the student on the back of each flashcard, the word (for example, a picture of eggs, a word on the back- eggs) is written.

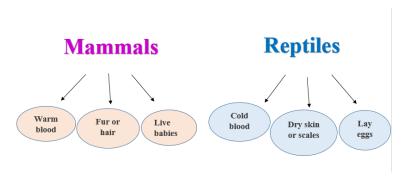
The game was the following. The student pulls a random flashcard from the deck. After reading the word on the back, it puts the card in the appropriate box. For further convenience, each image was colored with the color of the box.

The same goal is achieved by the realization of the exercise in electronic version - to fill each picture in the appropriate column of the table.



Work on consolidating the specifics of each group continues with an exercise to complete the name Mammal/Reptile in sentences.

The summary of the specifics of each of the two groups of animals was represented by the following scheme:



E. Verification of Understanding

After completing the submitted tasks, a third and fourth question from exercise 14 of the textbook related to the content of the respective part was asked:

"Have all reptiles got a shell?" and "Do most reptiles lay eggs?".

Third part

The above scheme remains on the board/screen while students read the last part of the text for specific animals.

After reading each small text in this paragraph, the teacher repeats the keyword. For example, after reading the first text, the word Scales is repeated and its place is indicated in the scheme presented above.

The model is written on the board:

Chameleon -> Scales -> Reptile

The teacher pronounces: The chameleon Has Scales. The chameleon is a reptile.

For the marmoset, the scheme on the board was presented as follows:

Marmoset -> fur -> mammal

The techer summarizes: So, The Marmoset Is A Mammal. It has got fur.

At the end of this process, the last question from the textbook was asked: "Which animals in the photos are reptiles?"

3. Presentation by reproducing a model

It is known that one of the main goals in foreign language learning, including working with text, is to form skills to transmit knowledge into a new situation, ie. for the student's independent statement on the topic examined in the text. In this case, given the specifics of children with mild mental retardation, we transform this goal into skills to be able to make a summary by reproducing a clear model.

In terms of this text, two models were written on the board- for each of the two groups of animals:

My favorite animal is a monkey. It has got fur. It is a mammal.

My favorite animal is a tortoise. It has got a shell. It is a reptile.

The task was to reproduce by a student one of the two models only by replacing the underlined word with the name of his favorite animal. Of course, in this case, the support of the teacher was of particular importance, especially when the children were choosing animals whose name in English was absent in the text of the textbook.

For the performance of the presented model worksheets are distributed with the relevant tasks, which are performed sequentially in the specified algorithm.

The results related to the perception and processing of the text by the students in the model presented can be summarized as follows.

In the first question, "Have mammals got warm blood?" 5 people gave the right answer, 15 students answered wrong.

On the second question "What do baby mammals drink?" 10 students answered correctly and 10 gave the wrong answers.

On the third question, "Have all reptiles got a shell" 13 students answered correctly, and 7-wrong.

On the fourth question, "Do most reptiles lay eggs" 10 students answered correctly, and 10-wrong.

On the fifth question, "Which animals in the photos are reptiles?" 6 students gave a partially correct answer, showing 1 or 2 animals, 14 students did not answer correctly.

Task 15, as already noted, is to determine the accuracy of the claim given by the teacher.

At the first statement, Mammals have got a shell 8 students have given a correct answer and 12 were wrong.

At the second statement, the Reptiles have got cold blood a correct answer was given by 10 students and a wrong one- by 10.

At the third statement The chameleon has got gray fur 9 people answered correctly, 11-Wrong.

At the fourth statement of the teacher The marmoset is a kind of monkey 7 students answered correctly, and 13-wrong.

The fifth claim on this task was The star tortoise has got a long tail with a correct answer False. 7 people gave a correct answer, 13-wrong.

In exercise 16 ten students gave a partially true description and 10 did not do it at all.

The second text A Day in the Life was worked by the 20 students who participated in the finding stage of the experiment by text 1 Amazing Mammals and Reptiles.

The course of the lesson was the following.

1. Introducing part

In order to introduce students to the subject, questions were asked: What's your name? Where do you live?

2. Working on micro texts

First part

A. Presentation - through a multimedia presentation with the individual paragraphs.

B. Extract basic information

The task is set to find and color in red the expressions: get up, have breakfast, go to school.

In view of the straight perception of the semantics of the key expressions, the students were offered three paintings with written expressions whose meaning was visualized.

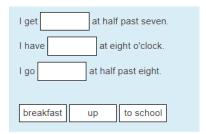


In the morning

The automation of the expressions is also realized through the next exercise- completing an expression with the right word. get... ..; have...; go....

C. Structuring sentences

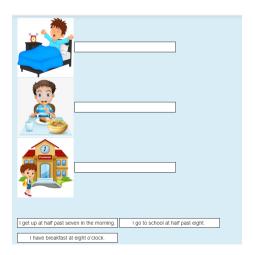
The first exercise at this stage was to fill an element of automated word combinations in sentences.



C. Synthesis of information.

As this lesson works mainly with sentences, the synthesis of information is realized by an exercise to connect a whole sentence with a picture.

After the task is fulfilled, the student reads all the sentences consistently.

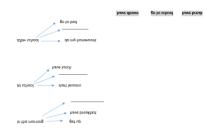


D. Verification of Understanding

At this point, the students were directed to the picture and answered the questions: What time do you get up/ Have breakfast/ Go to school?

On the same algorithm, work continued on the second and third parts of the text.

Thus, the students have done enough exercises in identical models, which provides the conditions for successful coping with the next task, which checks the degree of acquired knowledge in the overall text. The task is to fill the blanks in a scheme by selecting the right expression.



3. Presentation by reproducing a model

A task is set up for the formation of logical structuring of text related to the arrangement of sentences (from the individual parts). It is of particular importance that these sentences contain expressions for the main activities, as well as their time characteristics: in the morning, at school, after school.

The degree of understanding of the text presented is most explicit by answering the questions in exercise 19. The results of this task are as follows.

On the first question "Your name and where you live" a complete answer was given by 6 students, partially full-by 7 students and 7 students did not handle it.

On the second question, Your daily school routine 4 students gave a complete answer, 7 students- partially full and 9 students did not answer.

On the third question What do you do after school? Only 1 student gave an absolutely complete answer, including 4 activities, 1 student described 3 activities, 4 students described 2 activities, 9 students- 1 activity, 5 students did not give an answer.

4. Analysis of the results

4.1. Demographic data

As already noted, 40 students with mild mental retardation participate in the experiment. The demographic characteristic of all participants is the following:

30 Bulgarians- 75%

6 Turks - 15%

4 Roma- 10%.

etnos етн	ическа принадле Fre	quency				
		30	Percent	Valid Percent	Cumulative P	Percent
Valid	1 българи	6	75.0	75.0	75.0	
	2 турци	4	15.0	15.0	90.0	
	3 роми	40	10.0	10.0	100.0	
	Total		100.0	100.0		

The participants in the experiment are 11 and 12 years old. 28 of the students are 11 years old (70 %) and 12 of the students - 12 years old (30 %).

4.2 Method of Statistical Analysis

The methods of deductive statistics are used to check hypotheses. One of her main tasks is to evaluate the degree of security, ie. the likelihood of the conclusions made on the basis of the sample. In deductive statistics there are two types of methods that relate to both types of scientific hypotheses:

- Comparative statistical methods used to check hypotheses as opposed.
- Associative or correlation statistic methods used to check the association hypotheses.

For the purposes of this development, it is correct to apply the comparative statistical methods that make it possible to check the assumptions for differences. In this regard, the following definition can be cited: "Comparative research issues require the

application of comparative deductive statistics, which is used to establish a static significant difference between several groups of investigated persons" (Ganeva, 2016: 247). The correct application of the appropriate static procedure depends on the number and type of dependent and independent variables and the corresponding measuring scale.

One of the most commonly used statistical methods for checking the zero hypothesis is T-test. "**The T-test** is used when comparing only two groups (for example: boys and girls) or two samples and when it is necessary to compare their average values, measured with interval or proportionate scale.

In the present case of this empirical study, the appropriate type of T-test is the T-Test for related or correlated samples, which "is used when there are two excerpts that are connected to each other in a certain way.

In order to apply T-test for connected (correlated) samples, the following conditions with respect to variables must be fulfilled:

- Independent variable must be **nominal** dichotomous, that is, it should be divided into two groups.
- The dependent variable, which is measured under two different conditions and its arithmetic mean values are compared to both groups (samples), must be interval or proportional.
- The number of persons examined in both samples must be equal, since each value of one sample must be associated with a specific value from the other sample.
- "Normal distribution for the dependent variable for both groups (samples) and for the difference between their values. At sample size N> 30, the violation of this prerequisite is not a serious problem".

4.3 Quantitative and qualitative analysis of results

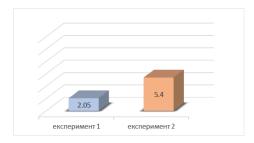
To check the differences between the two groups of examined persons for all tasks of the textbook, T-Test is applied to independent excerpts.

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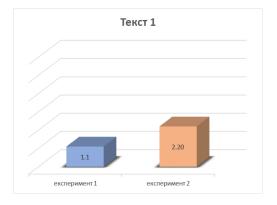
It is found that its results are statistically significant.

(t (32) = 3,157; p < 0.01)

It is established that the persons studied in experiment 2 have 2 and a half more average number of correct answers (x = 5.4) than the examined persons in experiment 1 (x = 2.05). (t (34) = 2,035; p <0.05)

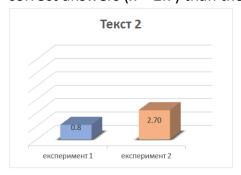


It is recorded that in the surveyed persons in experiment 2, the number of correct answers is on average 2 times greater (x = 2,20) of that of the surveyed persons in experiment 1 (x = 1,1).



Text 2 tasks also establish differences in the number of correct answers.

It is recorded that the persons studied in experiment 2 have an average of 3 times more correct answers (x = 2.7) than the examined persons in Experiment 1 (x = 0.80).



From the analysis of the results presented above, important conclusions arise about the specifics of the comprehension of a learning text in a foreign language by students with mild mental retardation.

As noted, the finding experiment led to work on two study texts: "Amazing Mammals and Reptiles" and "A Day in the Life". The conclusions of the work on the text "Amazing Mammals and Reptiles" / subgroup 1 / are as follows:

- 1. The animal theme is attractive to students and activates their attitude towards the workflow.
- 2. The lack of sufficient visual stimuli has a negative effect on the unambiguous perception of the semantics of the new words.
- 3. Students with mild mental retardation experience great difficulties in reading comprehensive text tasks.
- 4. Students' attention is difficult to hold from the beginning to the end of the text. Breaks are needed, as well as frequent incentives and support from the teacher when reading and understanding some new words.
- 5. Asking questions about the global understanding of the whole text immediately after reading it is extremely difficult for the students. This approach requires quick orientation in the keywords of text content, which is a serious problem for students in the analyzed group.
- 6. Negatively on the motivation of these students reflect questions whose organization does not correspond to the structuring of the text, ie. the first question of the task concerns the second paragraph of the text, and the second question to the third paragraph, etc.
- 7. Complex for solving are tasks for self-structuring statements on the text.
- 8. With a slow pace, the process of generalizing or applying the already absorbed in a new situation is realized, for example: the preparation of dialogues related to the topic of the text; working with questions whose answer is not directly explicated in the text.

The conclusions of the work and the results shown in the text "A Day in the Life" / subgroup 2 / are accordingly:

- 1. The theme of the text is directly related to the students' typical activities, which provokes serious interest.
- 2. The perception of the text is difficult because of the lack of graphically separate paragraphs in each of the parts.
- 3. The process of consolidating knowledge is slower.
- 4. Students find it difficult to answer questions that do not follow the exact structure of the sentence to which they relate.

- 5. The summary causes tension, although it is related to the theme of the text.
- 6. For students the least difficulties cause the tasks for oral expression at one support point: name, place of residence, specific activity, etc. This is explained in terms of the level of concentration of students of this age, as well as difficulties (linguistic and psychological), which generally accompany the expression in a foreign language.
- 7. Where it is necessary to make an extended statement with several information elements (eg for several activities in or out of school), students show poor results.

As the finding experiment shows, the main problems with the adoption of an English language learning text, regardless of its thematic specificity, by students with mild mental retardation are common: the inability to comprehend the text; difficulties in answering questions about global understanding; difficulties in questions whose answer is not presented directly in the text; difficult production of self-presentation.

In view of this, the didactic technology presented in the previous chapter was also proposed, which is adhered to the stage of the final experiment. The results achieved at this stage in answering the questions on the texts give a reason for the following conclusions:

- 1. Work on the text is optimized by working on its individual parts even when it is not graphically formed into paragraphs.
- 2. The most appropriate is the semantisation of the new and the consolidation of the studied vocabulary to associate with visual stimuli.
- 3. Working with keywords is crucial. This largely lowers the tension from the perception and understanding of the text.
- 4. Students' achievements are increased by applying methodological progression: semantisation by visualization- automation of semantics and the structure of key expressions- inclusion of key expressions in sentences- answers of questions
- 5. Questions of understanding are asked in separate, as short parts of the text as possible.
- 6. It is appropriate that the order of the questions follow the order of the individual information elements in the text.
- 7. The structure of the questions follows exactly the structure of the sentence- a response contributes to optimizing the results.
- 8. The self-presentation is realized with greater success in the presence of predefined models.

In other words, the results of the application of innovative didactic technology when working with this text as well clearly define and prove the basic ways of optimal perception and processing of an English language learning text:

- Work on the text of paragraphs/ semantic parts
- Targeting the keywords of the text part and marking them by students
- visualizing the meaning of keywords through appropriate paintings
- consistent absorption of any linguistic structure through several exercises
- Diversify exercises until the automation process is completed
- stimulate students to repeat after the teacher
- absorption of syntactic structures mainly by filling in already familiar words in sentences from the text
- complementing the activities reading, writing and speaking in performing each exercise
- compiling sentences on schemes written on the board
- Implementation of speech production mainly on clear models.

Conclusion

In the contemporary scientific and methodical literature, dedicated to the problems of students with mild mental retardation in foreign language education, the focus is most often on the processes of learning a new vocabulary, rarely on individual language structures. However, a methodological model for working with a learning text has not been proposed yet, and as it is well known, texts are a must-have element of a foreign language units, incl. in English.

The exceptional role of teaching texts in foreign language education is determined by several facts. On the one hand, the text characterizes the language capabilities of each user of the language. On the other hand, the ability to perceive, comprehend and reproduce text is directly related to the construction of communicative competence in students. And last but not least, the ability to perceive and make sense of information is most related to the success of students at all. That is why the dissertation work offers an optimized model for working with an English text for students with mild mental retardation. The experiment conducted with 40 students proved that:

- Appropriate is working on paragraphs of the text

- Optimizing the process of comprehending the text is directly related to working on key language expressions through a variety of tasks
- The semantic "reduction" of the text significantly supports the process of speaking production of students.
- The application of a suitable methodological algorithm when working with a learning text has a positive effect not only on the degree of awareness of the content of the text, but also on the speaking skill, realized by reproduction by students to a clearly assigned support model.
- The offered model for working with text activates the students' interest and enhances their desire to communicate in the foreign language.
- The application of the described methodological algorithm can be realized both through individual and group work with students with mild mental retardation.

During and after experimental work, no negative attitudes, difficulties or fluctuations in students were noticed for full participation in the learning process. Thus, the hypothesis of the study was confirmed that the application of the offered methodological algorithm for work could lead to a significant positive change in the target group of students in understanding and reproducing the content of the curriculum.

The attachment presents the application of the offered didactic model when working with English language texts for third-grade students.

<u>Recommendation for the future</u>: The developed methodological model for working with a learning text has been raised among a relatively limited number of students with mild mental retardation. The approval was carried out in resource centers. The same model can also be applied to students with learning disabilities in regular English lessons when working with other teaching texts similar to those suggested in the attachment.

Scientific contributions of the dissertation

- 1. The role of the text in the foreign language education of students with mild mental retardation is systematized.
- 2. A comprehensive methodological model for working with an English language learning text has been proposed for the education of students with mild mental retardation in grade 4.
- 3. A study has been done to prove that the application of the developed methodological algorithm improves the skills to perceive and understand text.

- 4. The implementation of the proposed methodological model improves the skills for speech production of students with mild mental retardation.
- 5. The proposed methodological algorithm is suitable for both individual and group work with children in the respective group in resource centers.
- 6. The developed teaching tasks in the analyzed texts can be used as a model for compiling such exercises also for other teaching texts.
- 7. The created learning tasks and electronic resources can be used to optimize English language training in 4th grade

Scientific publications on the subject of dissertation

- 1. Working with text in English training of children with mild mental retardation Annual of Sofia University "St. Kliment Ohridski DLTIS, Issue no. 22, 2021, p.53 p.62
- 2. For the role of electronic didactic means in the foreign language training of students with mild mental retardation -"Education and Arts: Traditions and Perspectives" -second scientific and practical conference, FESA, 2021, p. 398 -p. 409
- 3. For the "chunking" strategy in English language training of children with mild mental retardation "Education and Arts: Traditions and Perspectives" second scientific and practical Conference, FESA, 2021, p. 539 549