THE TECHNIQUE OF TEACHING RUSSIAN AS A FOREIGN LANGUAGE AT THE STAGE OF WORKING WITH TEXTS ON THE SPECIALTY AT THE MILITARY AVIATION INSTITUTION OF HIGHER EDUCATION

Olga A. Karpushova, Marina A. Mignenko and Galina P. Sycheva,
Military Educational-Research Center of Air Force "Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" (Branch, Syzran, Samara region), Marshal Zhukov St., 1, Syzran, 446007, Russia

Anastasia A. Moiseeva
The Branch of Samara State Economic University in Syzran, Lyudinovskaya St., 23, Syzran, Samara Oblast, 446010, Russia

ABSTRACT

The paper analyzes the experience of teaching foreign servicemen at the military aviation university of the Russian Federation. The purpose of this study is to develop a methodology for teaching Russian as a foreign language at the stage of working with texts on special subjects. The paper describes the methodology for working with a text on the specialty, describes an experiment that made it possible to draw conclusions about the advisability of using this technique in the process of teaching foreign military personnel at the Russian military aviation university. The paper considers texts and exercises designed to teach future helicopter pilots and technicians. The authors describe in detail the system of tasks and exercises, which allows significantly improving the quality of teaching the foreign military personnel at the military university in Russia.

Keywords: Teaching the Foreigners, Military Personnel, Russian as a Foreign Language, Military Aviation.

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1. INTRODUCTION

The issue of teaching a foreign language to foreign military personnel is one of the main issues of the methodology of teaching Russian as a foreign language: already in the first year, cadets arriving from the near abroad countries usually speak poor Russian and should use special literature in Russian.

The purpose of this study is to develop a special methodology for teaching the text exercises of the military-technical orientation.

The objective of the study is to improve the quality of teaching Russian to foreign military personnel at the stage of mastering the sublanguage of the specialty.

At the branch of Military Educational-Research Center of Air Force "The Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" in Syzran, the specialty language studies are already started in the preliminary course of the subject "Russian as a Foreign Language" (the section "Introduction to the Scientific Speech Style").

A sublanguage of a specialty is not an isolated system. Its study should be part of the learning process at all stages, although, the intensity of work on the sublanguage features certainly differs at different stages of learning.

Teaching aids for foreign students who receive a profession at Russian universities are represented only by books for reading in physics, chemistry, economy, medicine. As a rule, when selecting texts, the authors were guided by their amusement or tried to reflect the key moments of a course. Therefore, those texts are difficult to correlate with the target orientation of each stage of learning. Educational literature for teaching scientific aviation speech style to foreign military personnel is completely absent in different specialties.

In order to create correct and fluent mastery of the language, it is necessary to have textbooks, or a whole set of teaching aids, since "it is impossible to teach all types of speech activity to students in a limited period of time" [1]. Teaching specifically the language of the specialty is the main objective of a teacher of the Russian language department of a military aviation university.

The 20-year practice of teaching Russian as a foreign language at a military university shows that organizing the methodology for working with a scientific text (lack of manuals, lack of a clearly developed methodology), work with highly specialized texts and inability of foreign servicemen themselves to work on them are the main difficulties in teaching the Russian language to foreign military personnel.

The authors made attempts to use aids for civilian higher education institutions, but this turned out to be ineffective, since the teaching purposes at a military university were different. The objective is the formation of military personnel's working skills with special texts, since listeners will deal with texts in narrow specialties, which necessitates the mastering of special terminology. To this end, the Russian Language Department developed and published the teaching aids for teaching the sublanguage of precisely these specialties [2-10].

2. METHODS

The objectives facing the teacher of Russian as a foreign language at a military aviation university include the teaching reviewing, abstracting of special literature, preparing reports and participating in discussions, scientific conferences to the foreign military servicemen (FMS). The text construction can be taught based on the display and analysis of samples. But before deciding which types of work (exercises, tasks) will lead cadets to the ability to independently compose complex statements, it is necessary to specify which texts should be referred to as samples.
When teaching Russian to a foreign audience of an aviation university, the main objective is to instill cadets with the ability to freely use special literature in Russian, to develop skills in reading and translating special texts, for which it is necessary to achieve their full comprehension. Thus, in the process of teaching Russian as a foreign language in the preliminary course, one is faced with such an important issue as comprehension of special texts by foreign students.

In the words of Belyaev, "students learning the language in fact have to learn thinking in this language" [11]. The entire learning process should be understood as the process of turning cadets from one language base to another one. Thus, having mastered the second language, a person acquires the ability to think directly in this language. A characteristic feature of comprehension is its immediacy and fluency. These features make it difficult to study the process of comprehension and make it elusive.

The question is how, using which material and method to investigate the process of comprehension. In the authors' opinion, the process of comprehension both of meaning in the context and the content of a scientific text itself can be studied only in an experimental way. Such psychologists as Dilthey [12], Spranger [13], Jaspers [14] who have created the so-called "descriptive" or "understanding" psychology speak about the experimental study of the comprehension issue. The psychological issues of comprehension in the process of translating a foreign text are mentioned in the experimental study by Wartensleben [15].

The authors also study the process of comprehension experimentally. At the same time, the authors based their work on the statistical analysis of texts conducted both in Russia and abroad. An interesting study in this area was conducted by Frumkin and Vasilevich [16], who experimentally received direct subjective evaluation of both text elements and words in their native language. The first experiments abroad on obtaining direct subjective word evaluation were obtained on the basis of the French language by Noizet [17] and Flaman and the English language by Noble [15].

2.1. TASKS FOR SCIENTIFIC TEXTS

Teaching Russian taking into account the specialty at the special faculty is primarily in mastering the productive language means that are characteristic of linguistic and literary texts.

All kinds of tasks when working with special texts (the authors will operate with texts about Aviation Equipment, Radio-Electronic Equipment, Aviation Armament, Tactics) should proceed from the tasks of communication. They should facilitate the automated application of necessary grammatical forms and structures, as well as the development of synthesizing skills, i.e. the ability to realize an utterance in the form of monologic speech [18].

In order to develop the skills of monologic speech, the authors consider it necessary to introduce exercises that teach the curtailment of the original utterance, and exercises that teach the generation of one's own utterance, as well as its expansion [15].

These exercises can be built on the basis of separate sentences, a paragraph, and a coherent text. At the same time, texts can consist of at least two or three sentences.

In the methodical literature, the authors offer different types of text tasks. In the authors' opinion, the following four types of tasks are the most effective:

- Analytical tasks requiring analysis of a text.
- Analytical-speech tasks requiring certain speech actions, leading to the elements of a new text (but not a text as a whole).
- Tasks that teach the compilation of a new text based on this (finished) text.
- Tasks that train in the production of one's own text [19].

Tasks of the 1st and 2nd groups are aimed at developing the skills and abilities of the logical and compositional analysis of a text necessary for isolating its informative content and operating this content for communicative purposes. These are the skills of the semantic analysis of a text; establishing logical links between its individual parts in order to identify the basic information and restore it in writing; skills of written speech (annotation, reviewing, abstracting, drawing up a plan, note-taking).
The most typical exercises for implementing the tasks of the 1st group are the following:
- Dividing the text into complete semantic segments, statements;
- Determination of the main thought of the statement or the whole text (wording from a text);
- Drawing up a plan (formulations from the text);
- Accentuation of the opening, main and final parts of the text;
- Titling of these parts (wording from the text);
- Allocation of the part containing the proof of the proposed statement, etc.

The typical exercises of the 2nd group are the following:
- Establishment of semantic relations among sentences of paragraphs by means of questioning (a parallel connection – questioning from the main sentence to the rest, or a chain link – sequential questioning from one sentence to another);
- Determination of the sentence expressing the main idea of the text, discussion of other possible variants of the title of the text, etc.

In these exercises, the formulation of questions and the title, related to the analysis and some generalization of the material, includes elements of work on the creation of a new text.

The exercises of the 3rd group teaching the compilation of a new text based on the made-up text are aimed directly at the production of the utterance. Therefore, on the one hand, they teach the compaction of the text, on the other hand, they teach the expansion. At this level of the text creation, students need benchmarks, “hints” (for instance, specific vocabulary, a set of structures, a plan, etc.) that help to restore the text.

Here are some sample exercises:
- Drawing up plans of different types.
- Composing a new text by compaction of the made-up text.

Consider the types of exercises that involve compaction of the basic text while preserving the order of the description. The text “Trigonometry” [3] is proposed as the basic text.

Using a plan in the form of questions, it is necessary to write down the content of the text in writing applying the constructions “what is what”, “what (is) what”.

The result is a short text.
- What is trigonometry?
- What is planimetry?
- What is stereometry?
- What are the main concepts in planimetry and stereometry?

This abridged text will have a different material layout from the base text. It is supposed to simplify the structure of sentences by deleting unattached phrases, subordinate clauses.

The compaction of the text can also be done with reliance on a semantic question or an exercise that isolates information from the text, organizes the new text and reencodes the base one. Example: Obosnuite, pochemu osnovnymi ponyatiyami stereometrii yavlyayutsya plôskost’ i ob”emnye figûry (kub, parallelepiped, prîzma, piramîda, tsilîndr, shar, kônum i dr. (Explain why a plane and three-dimensional figures (a cube, a parallelepiped, a prism, a pyramid, a cylinder, a sphere, a cone, etc.) are the basic concepts of stereometry) (the Trigonometry text).

Expansion of the training text.

Such an expansion occurs mainly due to additional information extracted from exercises aimed at deepening and expanding the material of the basic text.

So, for example, the exercise of retelling material based on the made-up text, consistently expounding the facts and attracting additional information, directs the students to expand the text without recoding it, using additional information about trigonometry in other languages, in particular, in Arabic, Portuguese, Lao, Spanish and others (in terms of comparison), and with the use of rich factual material, which represents the main definitions (terms) of trigonometry. To perform this exercise, the authors recommend the text "Trigonometric Functions" [3].
The 4th group of tasks that train the production of one's own (in the full sense of the word) text includes exercises on a topic similar to or close to the studied lexical and grammatical material studied.

For instance, in connection with the topic of the text "Helicopter General Provisions", it is possible to offer cadets to prepare reports on a similar topic [9].

The scientific information contained in this text and the factual material presented in the exercises should contribute to the comprehension of this complex topic, and the exercise system is to develop skills in using the lexical and grammatical material of the lesson when producing a text on a similar or close topic.

A large place is given to abstracting, annotation and reviewing [20] when working with special texts. In order to teach this type of speech activity, the exercises are prepared for the semantic and linguistic compression of the scientific text, teaching the rephrasing at the lexical (word and phrase), grammatical (the transformation of syntactic units in the direction of their compression), logical and semantic levels.

The main stages of preparation for abstracting are familiarization with a text and a full comprehension of its content; semantic analysis of the text and the selection of material in accordance with the task; organization of the selected material, language drill and presentation [21].

Unlike the abstract, where the essence of the work is abridged, annotations include issues; the maximum degree of generalization is required. The abstract contains brief information about the book or article, about their content, etc. [22].

The FMS can offer a plan for drawing up the annotation.

The abstracting, annotating and reviewing are not an end in themselves; they are means of obtaining information for performing other types of work (writing articles and reports, developing topics for course and graduation papers).

In the authors' opinion, this form of organization of educational work, like the defense of abstracts, annotations and reviews, and speaking contributes to mastering the scientific style of speech, both in written and verbal forms, teaches to conduct conversations on the special topics.

3. RESULTS

As practice has shown, the main problem with the perception of special texts by FMS is the inability to comprehend such a text because of its specificity. This was the reason for the experiment. The experiment was based on the above-described method of working with a special text.

This experimental study of the comprehension of Russian scientific texts by foreign students was undertaken with a view to improving the methodology of teaching Russian as a foreign language at the advanced stage of studying Russian as a foreign language in the framework of the preliminary course at the branch of the Military Educational-Research Center of the Air Force "Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" in Syzran.

The experiment was conducted in two groups of the preliminary course, in which cadets from Congo, Mali, and Rwanda were taught. One group was a control one, in which cadets from South Africa and Cameroon were taught. In the experiment, texts on mathematics were presented. The choice of mathematical texts is explained by the fact that the test persons were cadets who studied the Scientific Style of Speech in the Mathematics section and had basic knowledge in mathematics, obtained at different educational institutions in their homeland.

These texts were not adapted, because the mathematical texts were small in volume, but at the same time, they represented something integral. Every word in these texts was strictly verified. Thus, the test persons were offered a maximally concise language. Remember that the purpose of the experiment was to test the comprehension of the original special texts.
It is well known that the texts presented for the experiment should be feasible for the test persons in terms of volume and complexity. Each text included about a hundred words, including terms. The material for the experiment included 10 theorems. Drawings were given if necessary. The presentation of the material took into account the sequence of its submission: from easy to difficult, from simple to complex. The content should be of interest to the test persons. Therefore, the authors proposed some texts, the content of which was familiar to the students in their native language. The texts were of interest from the point of the use of various grammatical forms and constructions, since the knowledge of individual words does not yet provide a comprehension of the whole sentence.

The level of the Russian language in the cadets of the first two and third control groups was almost the same. This was tested at the first lessons by a quiz. The quiz was developed by the teachers of the Russian Language Department of the branch of Military Educational-Research Center of the Air Force " Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" in Syzran.

The tests for advanced learning allowed determining the level of a) reproductive, b) transmissive, c) productive speech.

The experiment was conducted in a group of 10-12 cadets. A vocabulary was compiled from the presented text; all words were written out separately by groups. The first group A included common words, and the second group B included terms. The words were written out in the grammatical form given in the context (for example, soedinyayushchii (connecting), pryamye (direct), protivonapravlen (counter-directed), peresecheny (intersected), etc.) This was done to check both the comprehension of a particular word and the correct grammatical form of the translation into the native language. At the same time, grammar skills and the comprehension of the semantic parts of the text, including terminology, were checked. It should be noted that the dominant words in that vocabulary were the terms from the list B; and the words from the list A were local. So, there is a microlanguage, which should be perceived and learned by the test persons. With the correct implementation, accurate translation into the native language, these words are key, supporting for the subsequent work on mastering the skills of the content comprehension of both the text and its separate semantic parts.

The test persons started translating the lists of words A and B. There were about 30 words. The test persons should have written a dash against the words, the translation of which was unknown to them. If they knew the translation, they should have written a word in the native language. This took 10-12 minutes. When analyzing the comprehension of lexemes, a correlation was revealed between the number of known, unknown, semi-known words and the degree of the comprehension of the text. Observations showed that a test person, having received a sheet, read through the entire list and began to move his/her lips silently. Here begins inner speech, which acts on memory and thereby provides a comprehension of words. In the process of this work, the test person identifies the words known to him or her. At the same time, comprehension and memory are connected. By the end of the work, the student returns to untranslated words and tries to remember them. The test persons noted that it was easier for them to translate terms than common words. This is clear, since under the conditions of the French-speaking and English-speaking audience, when understanding undergoes between the Russian and the other English and French languages, the understanding of terminology is facilitated by the fact that the Russian terminology vocabulary is based on international terms with a small exception. After filling in the above-mentioned lexical series, the test persons were presented with the corresponding text, which they translated. During the translation of the text, there have been the following psychological moments:
Many words that are not translated by the test subjects during the first exercise became clear in the text according to the principle of conjecture. The meaning of the word can also be updated by associative connection with other words on the basis of the available skills acquired in the speech experience in the native language.

Incorrectly translated words in the context are often translated correctly, as a semantic support is no longer one but a group of words. The comprehension of a sentence, the semantic part of the text and the text as a whole often depends on the quantitative distribution of known, semi-known and unknown words. The context always raises the level of comprehension of an unknown word.

The authors' observations show that from the very beginning of learning, foreign cadets need to develop, and further expand "semantic feeling". This is the basis of Belyaev's position, who considers that "consciousness in practical speaking foreign language consists only in the fact that consciousness concentrates not on the language shell, but on the semantic content" [11].

A detailed analysis of the cadets' work shows that the number of correctly translated words is small. Translation into native language is done approximately, often wrong. Example:

connecting (soedinyayushchii) – connection (soedinenie),
will hold (provedem) – are holding (provodim),
designate (oboznachit') – means, to express (oznachaet, vyrazhat'),
contradiction (provirorechii) – to contradict (proviroechii'),
to propose (predlozhit') – to present, to continue (izlozhit', prodolzhat').

There are many words, word combinations with a dash, for example: prokhodit' (to pass), razlichat' (to differ), zaklyuchenie (conclusion), razobrannyi sluchai (case under consideration), pryamaya perekhodit sama v sebya (the straight line passes to itself), etc. No one could translate the following terms: luch (a half-line), otrezok (a segment), perpendikulyar (a perpendicular), vertikal'nyi (vertical), katet (a cathet), kasatel'naya (a tangent), gipotenuza (a hypotenuse), diagonal' (a diagonal), etc. It should be noted that the conducted experiment was not an end in itself. On its basis, a number of conclusions were drawn about the advisability of stimulating the comprehension of special texts with the help of directed exercises.

The next task of the experiment was to check the degree of the comprehension of a sentence, a semantic part of the text, and a scientific text as a whole. For this purpose, the cadets were offered the following exercises:

1 Insert verbs prokhodit' (to pass) or peresekat' (to cross).
2 Make sentences with phrases tsentr okruxhnosti (a center of circle), vnutrennii ugol (an inner corner), vysota treugol'nika (altitude of a triangle), opushchennyi perpendikulyar (drop a perpendicular), etc.
3 Make tasks using these words and phrases: iskomaya (unknown), otrezok (segment), vysota (altitude), storona (side), reshenie (attack), tochka A (point A), kratkaishii put' (minimal curve), put' ot A do V (A to B curve), peremennaya velichina (variable value), neizmennoe znachenie (unchanged value), pod pryamym uglom (at right angle), etc.

In the course of the experiment, observations were made of the behavior of the subjects. Their statements about the work being performed were recorded in the diary. Judging by these records, the experiment aroused great interest, the terminological vocabulary was translated easier (row B). The experiment results confirmed the above-described method of working with a special text.
4. DISCUSSION

The results of the experiment were used to compile collections of texts and exercises on the teaching scientific style of speech to the FMS [2-10].

As a result of the experiment, a system of exercises and tasks was developed to work with the scientific texts.

The plan and results of the experiment conducted by us were discussed and approved at the meeting of the Russian Language Department and at the meeting of the Academic Council of the Military Educational-Research Center of Air Force "Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" in Syzran.

The results of the studies were reported and discussed at the International Scientific Conferences in Omsk [23], in Lipetsk [24].

The experiment was carried out not only at the branch of the Military Educational-Research Center of Air Force "Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" in Syzran but also in the Volsk Higher Military Institute of Material Support.

5. CONCLUSION

The above types of work on a special text have been studied to a certain extent and presented in the scientific and methodological literature with appropriate recommendations for their application to students of technical universities. The methodology for working on a special text on the subjects Mathematics, Physics, History differs from the methodology of working on a special text on military technical subjects including Aviation Equipment, Aircraft Armament, Tactics, etc., since FMS already have basic knowledge in Mathematics, Physics, History in their native language, and they can use this knowledge on Russian lessons. Knowledge of special subjects is absent, and the information is received by the listeners as absolutely new. In order this information to be perceived by them in due measure, it is proposed to use the methods and techniques suggested by the Russian Language Department and the techniques indicated in the paper. Sharing the main provisions of the methodology of teaching Russian as a foreign language, the authors consider it advisable to use methodological recommendations and teaching aids developed at the Russian Language Department of the branch of Military Educational-Research Center of Air Force "Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin" in Syzran.

In the future, the Department plans to develop and publish aids for all special subjects studied by FMS in the military aviation universities of Russia.

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