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**DEVELOPMENT OF PROFESSIONAL THESAURUS IN TECHNICAL  
UNIVERSITIES STUDENTS ON THE BASIS OF RECEPTIVE  
COMMUNICATIVE SKILLS**

Modern life has changed the objectives of foreign language training in various professional fields. The condition for a successful personal and professional development is the formation of a foreign language professionally oriented communicative competence, which means the students' ability to express thoughts and opinions in a foreign language in interpersonal and business communication. Fluency in a foreign language as a means of professional communication is directly related to the degree of professional thesaurus development, expansion of which is an important and often necessary prerequisite for its improvement.

Professional vocabulary teaching is widely studied by modern methodology. Foreign scientists investigate different aspects of the problem. Approaches and techniques of teaching vocabulary are studied by T. A. Budarina, A. V. Gvozdeva, V. S. Korostelyov, H. V. Nikolaev, A. V. Matvienko, A. V. Zykova; methods of teaching academic and professional vocabulary are studied by O. N. Matveeva, E. V. Aleksandrova, N. E. Amosova, N. G. Pirogova, A. A. Myasnikov, O. I. Zhdanko, L. V. Pavlova, O. A. Vasilieva, I. G. Guseva. B. V. Belyaev, P. I. Zinchenko, M. B. Wesche, T. S. Paribakht dealt with psycholinguistic peculiarities of new vocabulary acquisition. N. I. Gez and J. Channel analyzed the distinguishing features of "active", "passive", and "potential" vocabulary. The principles of selection of minimum vocabulary and materials for reading and listening are investigated by V. A. Kondratieva, S. Y. Pozdnyakova, E. D. Arakin, E. I. Markina, G. P. Bukharova, M. A. Chigasheva, E. A. Aleshugina, M. West, P. Nation, and J. Coady. Furthermore, J. Hulstijn, W. Nagy described the method of

contextual guess, whereas methods of work with monolingual, bilingual, and combinatory dictionaries are studied by I. V. Petrosyan, E. V. Kulikova, M. V. Vlavatskaya, N. G. Arkhipova, R. Aust, M. J. Kelly, and W. Roy.

Of topical significance is the development of foreign language professional thesaurus in students of non-linguistic universities based on receptive communicative skills, which involves both involuntary and voluntary expansion of a foreign language vocabulary. While methodological literature pays close attention to the use of reproductive and reproductive/productive vocabulary exercises contained in the foreign language teaching materials, students' independent work with new lexical items in the process of listening and reading of professional texts, including work with different types of multimedia dictionaries and glosses, has not been covered in detail yet.

The object of the study featured in this article is the process of foreign language vocabulary teaching focused on the development of the professional thesaurus of students of technical specialties. The subject of this study is the method of foreign language professional thesaurus development in technical students based on receptive communicative skills.

The goal of the research is to develop techniques of effective improvement of foreign language vocabulary teaching by developing professional thesaurus during in-class and out-of-class sessions.

There are several definitions of the notion "thesaurus": 1) vocabulary that reflects notional links between words and other language elements; 2) systematic set of notions of a certain scientific field. Thesaurus also means the entire vocabulary of a language with comprehensive list of examples of its use in texts. In methodology, the term is used to describe a systematized vocabulary necessary for communication on a certain topic. Thesaurus serves as a special kind of information "accumulator", contributing to the personal development. Its content is determined by the specific denotative environment – information, knowledge, skills formed while training and actively used in different kinds of activities [1, p. 185].

In this research, we view *foreign language professional thesaurus* as a system of receptive and productive vocabulary knowledge and skills that includes highly specialized professional (terminological), academic, and technical vocabulary. These lexemes have a particular denotation or conceptual relatedness, full implementation of their specific meaning being only possible within a specialized sub-language, defining, therefore, their belonging to this special sub-language. They can also be used as a part of a literary or a national standard and possess distinct features of the inner organization (i.e., the quantity of lexical-semantic variations and correlations of the marked and unmarked lexical-semantic variations). They also demonstrate the so-called normative strain outside their specific context and have the ability to create a particular stylistic effect in case of actualization within a non-specific context [2, p. 59].

N. G. Pirogova distinguishes a special layer of so-called "sub-professional" vocabulary. This is a transitional layer between general and special vocabulary. This layer of professional vocabulary includes: 1) lexical items that describe notions used in many disciplines (branches of knowledge); 2) lexical items that realize their special meaning in one or several disciplines and that have different general meaning; 3) lexical items that are rarely used in general vocabulary, but have different meanings in several branches of knowledge; 4) lexical items that are traditionally used in general vocabulary, but have limited meanings in certain disciplines; 5) lexical items of general vocabulary that are used to describe technical processes and functions; and 6) lexical items that are used in specialized texts and perform an evaluative function [3, p. 8].

Increase (enrichment) of professional foreign language thesaurus occurs due to the emergence in it of new lexical knowledge and skills and as a result of the sophistication and deepening of the students' knowledge about lexical items in the process of reading and listening.

Receptive communicative skills – reading and listening – contribute to students' foreign language thesaurus development, allowing them to enhance the vocabulary in quantity and quality on receptive and productive levels. The process of

professional foreign language thesaurus development will be successful if reading and listening are regular and extensive.

Psychological basis of teaching vocabulary is the formation of *vocabulary (lexical) skills*, which are (1) automated actions on selection of lexical items relevant to the intention and its right combination with other lexical items in the productive speech, and (2) automated perception and association with the meaning in receptive speech. Different lexical skills (productive and receptive) have their own structure and are integrated into communicative skills. Provided certain conditions are met, lexical skills can upgrade to a new level, when lexical actions acquire transferability to be performed in changed conditions. The formation of lexical skills of all levels is based on a range of *cognitive processes*, the main being thinking, memory, attention, and imagination. Learning of the meaning of foreign words is largely dependent on the unique personality and cognitive make-up of an individual.

Active work of the students' cognitive processes when mastering the foreign language vocabulary ensures meaningful and effective learning of the material and, thus, is a prerequisite for the successful formation of stable and flexible vocabulary skills. Development of different vocabulary skills and expansion of lexical knowledge lead to the formation of lexical competence in prospective engineers, which is seen as the ability to determine the contextual meaning of the word, compare its volume in two languages, understand the structure of the word's meaning, and identify the specific national content within the meaning of the word based on the lexical knowledge and skills, as well as personal language and communicative experience [4, p. 20].

Being a complex structural formation, lexical competence includes the following elements: 1) lexical (vocabulary) knowledge; 2) lexical (vocabulary) skills of a lower level; 3) lexical (vocabulary) skills of a higher level; 4) student's language and communicative experience; 5) student's personality.

Academic motivation is a significant factor determining the specifics of the educational situation within a certain time interval. Its level determines the readiness to perception, concentration of the attention to a language aspect under examination,

energizes mental activity and, therefore, determines the final positive outcome of the lexical competence development. In the process of teaching, instructors can indirectly affect the development of motivational basis of learning, forming prerequisites and foundation for the formation of the necessary needs and motives, creating certain learning environment and atmosphere, selecting relevant language and communication material, using special teaching media, forms, techniques, strategies and exercises [5, p. 11].

The success of the formation of a system of stable lexical skills of different levels largely depends on the organization and presentation of the lexical-semantic information that can be presented in spreadsheet and graphical form.

Full information about the form, peculiarities of the meaning, use, rules of application of lexical items is stored in the internal lexicon, which contains not the lexical items themselves, but their mental representations. Internal lexicon is a special storage of lexical knowledge and the person's cognitive experience. Accuracy, speed of retrieval, and verbalization of the necessary information from the lexicon depend on the nature of vocabulary work in the educational process. Considering the mental nature of the organization of the internal lexicon, it's reasonable to apply the following principles while working on vocabulary: 1) mastering of new vocabulary items should be based on the already existing mental semantic structures taking into account the actual cognitive base, and 2) interpretation and understanding of the meanings of new vocabulary items should occur simultaneously with the formation of new lexical relations and restructuring, supplementing the existing ones.

As the best approach to vocabulary teaching, N. G. Pirogova proposes to use *cognitive-hybrid approach*, which reflects the close connection between the receptive communicative skills (reading and listening) and a students' foreign language professional thesaurus and ensures the depth, integrity, and consistency of its development. The proposed approach reflects the possibility to transfer the lexical material from reading into listening and to conduct the hybrid process of reading-listening. This approach to vocabulary teaching allows considering the psycholinguistic peculiarities of foreign language thesaurus development. It helps the

teacher to make allowance for the obstacles that students may face when learning the lexical material while reading and listening, to correctly select new lexical items for the receptive communicative skills, to use teaching methods that facilitate vocabulary development, as well as prepare students for independent work on the development of the foreign language thesaurus [3, p. 11].

Reading and listening create optimal conditions for learning vocabulary in context, allowing students to understand the variety of meanings of lexical items and learn all the combinations of words taken as a whole. Involuntary (passive) vocabulary learning in the process of extensive reading and listening has a positive effect on the development of their professional thesaurus development.

Selection of teaching materials for the in-class and independent work, the foreign language teacher should take into account the following criteria: professional orientation and informativeness of texts, their conceptual accessibility and variability, credibility of sources and timeliness of the information they contain, as well as lexical density and volume of the texts. For extensive reading and listening, it is desirable to provide authentic specialized texts, which may be of interest for students, motivate them to read and listen in the foreign language, to prepare them for independent reading and listening. At the same time, the amount of new vocabulary can grow dramatically, if the reading and listening are done on a regular basis.

The structure of each thematic unit includes two variants of a case-based informative text that forms the basis for both receptive and productive communicative skills. The first part of the textual information, revealing the subject of a separate structural unit, is given as a summary of the lecture material. This part of the block doesn't actually contain the logically structured and complete text that textbooks traditionally feature. This text is for a hybrid reading and listening comprehension. The main requirement to this text is its full structural and factual identity to the text of the lecture of the corresponding section of the textbook. This means that every key aspect of the lecture as presented by the professor reflects the same sequence, terminology, and grammatical structures, as the summary presentation. Having learned the key vocabulary when listening and reading the main

text, students, then, go on to expand it cognitively and semantically, as well as pragmatically, in the process of further structural and semantic analysis of the main domain-specific text.

There are several major tasks of lexical competence formation: 1) cognitive, i.e., the students' intellectual development; 2) language, i.e., lexical knowledge and skills development, and 3) communicative, i.e., the readiness and ability to solve communicative tasks using available vocabulary. According to the abovementioned tasks, A. E. Sizemina identifies three subsystems of cognitive and communicative system of exercises: a) cognitive and associative, b) *linguo-systematic*, and c) communicative and cognitive.

The aim of *cognitive and associative subsystem* is the actualization of the primary cognitive knowledge and students' experience, engaging of their interests and emotions. The exercises of this subsystem are designed to activate topic-relevant lexical items and associative relations within the lexicon; to introduce new lexical items and ensure their semantization, and to identify the key lexical items of the topic. Among the key cognitive and associative exercises are associative and exercises on semantization. Associative exercises actualize lexical items according to their similarity, contrast, and adjacency. Semantization of lexical items is made possible through both translation into the native language, as well as using non-translation techniques.

The *linguo-systematic subsystem* focuses the students' attention on the specialization of information, its elaboration, processing, comprehension, and structuring. The exercises of this subsystem are aimed at mastering the lexical information in full, as well as its use. They entail the analysis of the forms of the word, clarification of its meaning in relation to other lexical items of the native and foreign languages, identification of the cultural component of its meaning, background information, stylistic features, as well as understanding of the associative potential of foreign words. Exercises of this subsystem lead to the mastery of lexicon items as linguistic objects, i.e., learning their formal, semantic, paradigmatic, syntagmatic, and cultural peculiarities.

The key exercises of the subsystem are exercises on combination, differentiation, transformation, word formation, substitution, and translation. Combinatory exercises aim at distinguishing and reproduction of the lexical items' forms and meaning, their compatibility and reproduction. Differentiating exercises ensure identification and recognition of peculiarities of foreign language world-image as reflected in lexical items. Transformational exercises develop the ability to communicate the same idea in different ways or by using limited vocabulary. Derivational exercises are designed to develop linguistic creative thinking and language guess. "Fill in" exercises allow learning peculiarities of foreign language lexical items and applying this knowledge in practice.

Exercises of the *communicative and cognitive subsystem* allow using lexical items in receptive and productive communication. They are aimed at problem tasks solving, contribute to vocabulary skills improvement, and, at the same time, provide for the development of communicative and cognitive motivation. The exercises of this subsystem can be divided into communicative and creative. The absence of a clear distinction between the two is determined by the fact that any communicative act in a foreign language contains a creative element. At the same time, creative exercises of this subsystem work toward solving communicative tasks. Thus, the type of an exercise is determined by its orientation to a certain aspect of the activity.

The system of exercises includes monitoring exercises, allowing for timely diagnostics, control, and correction of the process of foreign language vocabulary teaching. Monitoring exercises are distinguished from other exercises of the subsystem by their integrative and comprehensive nature.

Application of the abovementioned system of exercises ensures: a) creation of mental images of the studied lexical items; b) formation of stable associations of the word with other words, theme, and situation; c) accuracy of the choice of lexical items to express the thoughts; d) compatibility of the lexical items according to the language standard; e) ability to distinguish cultural component within the meaning of the word; f) adequate use of the lexical items in different communicative situations;



g) "awareness", automated character, sustainability, and flexibility of students' lexical skills, and h) growth of vocabulary [5, p. 16].

The abovementioned system of exercises should also include exercises on the use of *dictionaries* (constituting *lexicographic skills*). These exercises are designed for the formation of the ability to use learner's dictionaries, including specialized ones. They help students learn to navigate in the structure of the dictionary based on the knowledge of the dictionary "politics", quickly find needed entries and select the desired meaning in them, determine the scope of lexical meaning, work with abbreviations (specific to the text on the specialty), with American English and British English versions, pronunciation, as well as get accustomed to the limited use of the dictionary as an extra-textual source. Dictionaries and glossaries as extra-textual sources supplement the contextual guess and word-formation analysis as means of deriving the meaning of new lexical items. Students are free to use definitions to verify their contextual guess (method of validation). Consulting e-dictionaries (both bilingual and monolingual) and glosses (text, image, text and image) helps to compensate for the lack of involuntary vocabulary acquisition, as a thorough work with new words positively affects their memorization.

Multimedia environment is beneficial to language acquisition, including the development of foreign language thesaurus, as students have the opportunity to choose an educational resource that meets their knowledge and interests during the independent work. Multimedia resources help engage students who lack motivation, allow them to control their work; they provide an effective interactive training according to students' individual abilities. Students can choose to use all the advantages of multimedia resources more often. Modern technology eliminates the barrier between the instructor and the students, gives students access to information, i.e., self-study materials that allow them to experiment with the language, efficiently communicate with each other, and evaluate the results. The instructor should introduce students to the functionality of the computer technology and multimedia resources, which are effective means of the development of students' independence.

Thus, the study of approaches to the foreign language professional thesaurus development has demonstrated that the development of lexical competence of technical university students determines the development of rational methods of foreign language vocabulary teaching, which are effective on the condition of students' active, conscious, and purposeful activity. Among the conditions of the effective teaching of receptive communicative skills, which form the basis for acquisition and development of professional vocabulary, are the authenticity of the materials, as well as the presence of the techniques of the foreign language vocabulary work according to the fundamental principles of the cognitive nature of its structure and function.

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**Пастухова С. Ю. Методика розвитку професійного тезаурусу в студентів технічних ВНЗ на основі рецептивних видів мовленнєвої діяльності**

У статті представлено наявні підходи до вирішення проблеми розвитку іншомовного професійного тезаурусу в студентів технічних вузів; запропоновано класифікацію спрямованих на лексику вправ, що враховують комунікативно-пізнавальні потреби й інтереси студентів; виявлено основні прийоми роботи над професійною лексикою.

*Ключові слова:* рецептивні види мовленнєвої діяльності, професійний тезаурус, лексична компетенція.

**Пастухова С. Е. Методика развития профессионального тезауруса у студентов технических вузов на основе рецептивных видов речевой деятельности**

В статье представлены существующие подходы к решению проблемы развития иноязычного профессионального тезауруса студентов технических вузов; приведена классификация лексически направленных упражнений, учитывающих коммуникативно-познавательные потребности и интересы студентов; выявлены основные приемы работы над профессиональной лексикой.

*Ключевые слова:* рецептивные виды речевой деятельности, профессиональный тезаурус, лексическая компетенция.

**Pastukhova S. Yu. Development of Professional Thesaurus in Technical Universities Students on the Basis of Receptive Communicative Skills**

The article reviews the main approaches to foreign language professional thesaurus development in technical universities students. The classification of vocabulary exercises considering the students' communicative and cognitive needs and interests has been provided. The basic techniques of professional vocabulary analysis and work have been identified.

*Key words:* receptive communicative skills, professional thesaurus, lexical competence.

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