ANALYSIS AND SELECTION OF SPECIAL VOCABULARY FOR MASTERING IT BY STUDENTS IN NON-LINGUISTIC UNIVERSITY

Olga Khalupo

Doctor of Philological Sciences, South Ural State Agrarian University, Russian Federation, olgakhalupo@list.ru

Abstract

The work is devoted to the analysis and selection of lexical material including terms, words and expressions related to the professional sphere; they are necessary for the acquisition by the students in a non-linguistic higher educational institution. In the age of numerous and diverse information, it is difficult to determine and restrict the required study material from the useless one, the most important information from the secondary one, the relevant developments from the outdated ones. In this regard, it is necessary to develop and follow certain criteria for the selection of lexical material, its adequate analysis in a particular area of knowledge and on this basis to present relevant material to students. At present, it is important to take into account the major changes occurring in professional spheres, follow the latest developments, consult with leading experts and scientific personnel who investigate problems in their professional field, write scientific articles, that is, be aware of the latest research and development. The main selection criteria for lexical material may be: expediency (selected lexical material adequately ensures the development of skills and abilities according to the program); correlation (correspondence of the material to the professional orientation of the students); quantitative adequacy (the average amount of vocabulary for acquisition during a certain time interval); functionality (correlation of lexical material with the possibility of practical application, that is, the ability to perform its function in the implementation of language activities that satisfy the objectives). The task of mastering special vocabulary by students implies the process of interaction, which will contribute to the adequate realization of the intentions of those who communicate in the professional sphere. To solve this problem, it is necessary to acquire appropriate language material. As practice shows, linguistic material is mainly assimilated by acquiring units of the language at the lexical level.

Keywords: Foreign language, university studies, vocabulary of professional sphere, vocabulary selection, vocabulary analysis, selection criteria.

1. INTRODUCTION

The economic, social-cultural and even political changes taking place in a society lead to an increase in the number of professional interactions between various organizations, companies and individual communities from other countries. Under these circumstances, it becomes necessary to master a foreign language not only at the conversational level, but also to master it at the professional level in a particular area of interaction. Recently, more and more attention is paid to the possession of certain competencies at different

levels of education. Receiving an education in a higher educational institution means not only obtaining knowledge in the relevant field, but also the ability to further develop the skills and be able to constantly improve and update knowledge. All this knowledge, skills and abilities are integrated in the concept of "competence", which became the determining factor in obtaining education. At present, when getting an education in higher educational institutions, the important role is given to the formation of competences in the field of professional foreign language communication, which implies the implementation of high-quality and productive professional activities of a specialist in the relevant field.

To prepare a specialist who owns this type of competence, it is necessary to use appropriate means and apply adequate tools that have specific features in a higher education institution. It is assumed that the students, who enter a higher educational institution, already possess a certain level of knowledge in the field of a foreign language and they have learned a lexical minimum, which makes it possible to understand and be understood in the process of interaction. However, as practice shows, students pay attention to the subjects that they intend to pass for entering a university, and a foreign language is not mandatory for admission to non-linguistic universities: agricultural, technical, medical, etc. Therefore, the problem arises during the first lessons when it turns out that the level of proficiency in a foreign language is insufficient. Thus, the teacher has to "look for" the opportunity to cover the material, follow the curriculum, teach how to communicate reasoning from the level of students' training. Sometimes it is necessary to change the methodology, approaches, educational material, carry out the selection and analysis of vocabulary intended for study.

In the age of numerous and diverse information, it is difficult to determine and limit the necessary content from useless one, the most important matters from secondary ones, the relevant information from outdated one. In this regard, it is necessary to develop and follow certain criteria for the selection of lexical material, its adequate analysis in a particular area of knowledge and on this basis to present the relevant material to students. At present, it is essential to take into account the changes occurring in various professional spheres, follow the latest developments, consult with leading experts and scientific personnel who investigate the problems in their professional field, write scientific articles, that is, be well informed about the latest research and development.

2. LITERATURE REVIEW

More and more studies show that students with an average level of a foreign language have difficulty in understanding, learning and using subject terms in their studies (Mežek, 2013, Lessard-Clouston, 2006, Ryan, 2012).

Especially it refers to the technical words. Technical words are a special group characterized by several features: these are more rarely used words, limited to a specific area in which they are used with a sufficiently high frequency (Nation, 2001; Nation & Hwang, 1995; Chung and Nation, 2004, Pearson, 1998); they are a part of the knowledge in a particular subject area (Chung & Nation, 2004) with a certain relationship with other terms in this area (Pearson, 1998). During studies the words are absorbed and replenished gradually; knowledge of the word and its meaning and usage are expanded and improved (Jiang, 2000; Sonaiya, 1991; D. Gablasova, 2012).

In English vocabulary teaching, the effectiveness of vocabulary acquisition depends on the method the teacher uses and teacher's enthusiasm (Nation, 1990). Some researchers think that integrating technology into the curriculum is one of the tools being used in the classroom, which can help students to solve their problems, have in-depth knowledge to the professional field and train higher level of learning outcomes (Harris, 2005, McCormick, Scrimshaw, 2001). There are many English vocabulary teaching strategies, such as word family, compound words, collocation, semantic map, affix, context clue, etc. (Blachowicz, Fisher, 2006).

In our opinion, the quantity of lexical units should be related to its quality. To achieve the desired result, it is necessary to carefully select the appropriate units related to terminological vocabulary, since their excess may lead to the non-assimilation of the material due to overloading of words and expressions on a particular topic. On the contrary, the lack of lexical units will lead to the assimilation of insufficient knowledge, misunderstanding of texts, failure to make exercises, as well as incomplete learning educational material (Khalupo, 2017, p. 213).

3. MATERIALS AND METHODS

The composition of lexical units related to a particular professional sphere is constantly changing. Some words and expressions leave or disappear very quickly, others remain for a long time.

Let us take as an example the structure of an engine. About twenty years ago the *fuel injector* included two separate parts: *a high-pressure pump* and *an injector*. Now, most diesel engines of various brands operate on a *combined mechanism*, namely a *pump nozzle*, in addition many engines are *electronically controlled*. Changes occurred in the design of the *cylinder head*. Consequently, the changes in in terms of content should also occur in the studying material. New terms that appeared in connection with the development of technology should be reflected in the material for learning and mastered by students.

As an example, we take another area of engineering profile: the field of electrical engineering, electrification and automation, where certain changes have also occurred. For example, lexical units of *resistance (as an element), capacitance, apparent power, magnetizing force, constant dielectric constant, vacuum constant*, etc. have become outdated from the point of view of technical progress. They were replaced by new terms that are compulsory for learning: *resistor (as an element), electric capacitor, inductive coil, dielectric permeability, surface effect*, etc.

Changes are also taking place in the economic field. As practice shows, the terms in this area vary faster. In this regard, the use of various means, products, methods results in appearing new terms, others become obsolete and the rest remain to function in society. For example, rather new terms in this sphere are *cryptocurrency, cryptomarket, bitcoin, blockchain, tramponomics, mining, big date, binary option, cashback, subprime credit, smart contract, clearing, tokenization, green bonds, repatriation of capital*. On the contrary, the terms *voucher, Government short-term bonds, MMM (in Russia), check investment fund, gold loan, unified social tax, monometallism, dotcom, synthetic debt* are becoming less usable.

Another area of human activity in which new terms and professional vocabulary appear very quickly is computer technologies and the Internet. There are some significant changes not only in technical terms, but also in the methods and techniques of use. For example, the terms *floppy disk, streamer, AGP slot, punch card, punched tape, math coprocessor, ICQ, IK port, home networks, technology 1g and 2g* are out of active use. They are replaced by *machines learning, neural networks, cloud, chatbot, voice search, internet of things, 3d printing, insta blogging, mobile applications, AI algorithm, vpn, anonymizer, chipization*.

In addition, at the present time, in the era of globalization, in times of a huge flow of information, students cannot always correctly separate the necessary information from the unnecessary one, the important matters from the less significant ones. In this connection, the issue of choosing the means that will be useful and productive becomes urgent.

For example, when studying the programs "Automobiles and Automobile Fleet", "Technical Systems in Agribusiness (Operation of Technical Means)" in higher vocational education, the following active vocabulary of the lexical minimum for students to remember when learning the topic "Automobile Parts" will be sufficient: *break point, cam, camshaft, combustion chamber, compression, current, displacement, exhaust stroke, exhaust valve, to expand, friction, fuel, to generate, intake manifold, intake stroke, intake valve, piston, power stroke, reciprocating, to reduce, to release, residual, rocker arm, to rub, spark plug, to suck in, torque; water jacket.*

When learning the topic "Conductors and Insulators" by the students of "Power supplying" department the following set of lexical units would be appropriate: *conductor, insulator, to resist, conductance, to transmit, electric current, electric charge, material to be employed, conducting material, opposition, substance, copper, iron, silver, metal wire, rubber, asbestos, glass, plastics, air, to cover, high voltage, transmission line, bare wire, to leak off, electrical engineering.*

When studying the topic "Plant Protection" by the students of the "Agronomy" department the most sufficient and non-redundant, in our opinion, there will be a set of the following lexical units: *to affect, appendix, bacterium, blight; to cause, cell, to cure, to damage, to decay, disease, duct, fission, fungus, germ, to injure, mildew, to multiply, nematode, pathogen, to penetrate, pest, to resist, to retard, to supply, tissue, vascular, wilting.*

In our opinion, a professional foreign language requires a special approach in terms of the selection of lexical units related to terminological area. They should meet certain criteria. Practice shows that it is necessary to observe the "reasonable" quantity and "adequate" quality.

Using this approach, students will more effectively learn the lexical units and to reinforce, update them. The teacher should identify the most useful key words depending on the program of training, and then the students could use them without further difficulty in speaking when negotiating or writing, when writing letters, messages, reports, preparing presentations, when translating professional texts, and also doing research in their area of knowledge. It is necessary to identify such criteria for the selection of terminological

lexical units that will correspond to the goals and objectives of teaching a professional foreign language in terms of content and quantity. In our opinion, such criteria can be *functionality* and *sufficiency*.

Taking into account the criterion of sufficiency, it is necessary to identify those lexical language units that are crucial for the accumulation, preservation and transmission of information related to professional foreign language, specialized topics. Based on years of experience, it can be assumed that the most optimal number of words and expressions on a particular topic, which students learn within the proper level, is on average from 25 to 30 units per lesson.

In addition, it is compulsory to reinforce vocabulary in terms of repetition, using them in written and oral exercises, and renew them after a certain period of time. Only then we can consider one or another lexical unit to

CONCLUSION

In modern conditions, when the number of economic, research, cultural, political contacts with representatives of different countries is increasing, a graduate of a non-linguistic higher educational institution should possess not only the knowledge and standards of a spoken foreign language, but also competencies in the field of professional communication. In order to be competitive in the labor market, it is necessary to speak a foreign language well, to communicate in professional sphere in order to resolve issues related to your professional activity. Thus, proficiency in a professional foreign language is impossible without mastering the corresponding lexical units of terminological vocabulary, which should be carefully selected and presented in the material for studying (Khalupo, 2016). Their justified choice will contribute to the development of necessary qualities of students and their training for interaction in the international community at a professional level. The process of assimilation of a certain system of knowledge, norms and values by a person helps him or her to be in demand, to function as a full member of any society; this, to a greater extent, depends on his or her literacy, ability to use various language means.

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