

**SELECTING MATERIALS FOR FORMING LEXICAL COMPETENCE
IN PROFESSIONAL SPEAKING OF FUTURE METALLURGISTS**

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Summary. In the article the author describes the procedure of selecting materials for forming lexical competence in professional speaking of future metallurgists. The normative national and international documents of studying foreign languages are considered. Analyzed the topics of the course, job-related areas and situations necessary in forming lexical competence, principles and criteria of selecting lexical units.

Key words: lexical competence; metallurgical topics; job-related situations; professional skills; principles; criteria.

Formation of English lexical competence is implemented within the field of professional communication, set range of topics and situations, due to the needs of future professionals in metallurgical industry. Selecting materials requires in-depth knowledge in profession, taking into consideration student's background and learning experience, educational objectives, lexical awareness or the ability to use terms of metallurgy in all types of speech activity.

Selected materials are not only a learning tool, but also a source of professional information. The problem of selection lexical units was studied by Benjamin A. [1]; Crow J. [1]; Lessard-Clouston M. [6]; Nation I. [8]; Thornbury S. [10; 11], and others. However, analysis of existing researches made it possible to conclude that the problem selection of educational materials for teaching students of metallurgical specialties has not been analyzed yet.

The purpose of the article is to identify and clarify the materials selection criteria for the formation English lexical competence in professional speaking of future metallurgists. The objective of the paper is to analyze the requirements for learning material; to determine the range of metallurgical topics; give a list of the job-related areas, situations and skills; describe the principles and criteria for the selection lexical units.

Considering the semantic content of teaching materials, we should rely on such national and international documents, as: National Curriculum for Universities «English for Specific Purposes»; Common European Framework of References for Languages; National Qualification Levels of Metallurgists' Achievements and Individual Syllabuses of Learning English in Technical university of Ukraine, where the experiment is conducted.

As Ukraine has declared its intention to become an equal partner within the Bologna Process framework, Ukrainian universities are expected to confront the European standards in language proficiency. Following the recent national ELT reform at secondary level and taking into account international practices in language education at tertiary level, the ESP Curriculum states that the minimal acceptable English language proficiency level to qualify for a Bachelor's degree is B2 (Independent User) [4]. However, the standards specified in the National Curriculum are general and need to reflect the needs of the students of metallurgical specialties, should be based on professional skills and include the following contents:

- 1) professional content based on subject knowledge of metallurgy;
- 2) situational content, covering the activities of the future metallurgist;
- 3) a pragmatic content, which determines the necessary practical skills and useful knowledge of professional foreign language [4].

The selection of lexical elements is affected by the professional areas and situations in which they are used, and may vary considerably for individual syllabuses [4]. According to CEF, basic vocabulary selection include adherence to lexical and statistical principles (most frequent lexical items in the content are), the selection of written and spoken English authentic texts and studying a key words to perform communicative tasks [3].

Any communication always takes place on a specific topic, which determines the content of this communication, and runs in a given situation. Teaching materials should be organized thematically, and themes that come one after another must be the largest units of content in this material. Topics should reflect current trends in metallurgical industry and meet the requirements of globalization profession. Ways of forming the English

lexical competence in professional speaking designed according to the requirements of the Individual Syllabuses of English for professional purposes [4] in the field of knowledge 0504 – Metallurgy and Materials, for the areas of training 6.050402 – Foundry; 6.050404 – Metal Forming; 6.050401 – Metallurgy, which includes the following list of topics: *Topic 1*. Personal Identification. Discussion on the topic: «Metallurgy as a science»; *Topic 2*. Professional Environment and Routine. Discussion on the topic: «History of metallurgy»; *Topic 3*. Relations with Colleagues and Clients. Discussion on the topic: «Outstanding Metallurgists»; *Topic 4*. Travel on Professional Purposes. Discussion on the topic: «Metals»; *Topic 5*. International Conferences. Discussion on the topic: «Alloys»; *Topic 6*. International Meetings and Discussions. Discussion on the topic: «Cast Iron»; *Topic 7*. Health and Safety. Discussion on the topic: «Metallurgy of steel»; *Topic 8*. Contracts and Agreements. Discussion on the topic: «Non-ferrous Metallurgy»; *Topic 9*. Industry unit. Information. Discussion on the topic: «Heat Treatment of metals»; *Topic 10*. Products. Discussion on the topic: «Corrosion and Metals Protection»; *Topic 11*. Services. Discussion on the topic: «Foundry»; *Topic 12*. Personal and Academic Issues. Discussion on the topic: «Rolling».

It is necessary to give the general professional situations that reflect the activities of the future specialist under metallurgical specified topics, identify skills needed to implement oral speech communication. In ESP [4] real-life professional situations may be described in terms of the:

- 1) location and time when they occur;
- 2) control structures and activities;
- 3) persons in their professional roles;
- 4) objects in the environment;
- 5) events;
- 6) operations performed by the persons involved;
- 7) the discourse taking place in the situation;
- 8) channels of communication.

We tried to combine the given topics with professional situations that contribute to the development of communication skills of future metallurgists with general skills, necessary to implement the requirements of teaching professional English given as an example in the program ESP. List of general professional situations and skills presented in the table.

Metallurgical topics, job-related areas and situations necessary for the formation English lexical competence in professionally oriented speaking

Job-related areas	Metallurgical topic	Job-related situations	Skills
1. Personal Identification	Metallurgy as a science	<ul style="list-style-type: none"> ● greeting and introducing oneself; ● employment; ● establishing contacts with colleagues; ● familiarization with working place and duties; ● joining to the working team. 	<ul style="list-style-type: none"> ● resume; ● participating in the interviews, discussions; ● dealing with telephone calls; ● establishing contacts with colleges and partners; ● presenting and passing information.
2. Professional environment and routine	History of metallurgy	<ul style="list-style-type: none"> ● presenting the title/subject; ● specifying the purpose/objectives; ● sign posting the presentation; ● administrative routine; ● supervising; ● planning and monitoring daily work. 	<ul style="list-style-type: none"> ● making presentation of a product; ● providing and receiving feedback; ● studying the experience of advanced metallurgical enterprises; ● developing and implementation of processes based on the past experience.
3. Relations with colleagues and clients	Outstanding Metallurgists	<ul style="list-style-type: none"> ● social events: meetings, appointments, business lunches; ● communication via Internet; ● discussions at the working place; ● negotiations with clients and partners. 	<ul style="list-style-type: none"> ● exchanging information on various issues; ● discussing the professional interest and leisure activities; ● participating in non-formal meetings; ● dealing with information about prominent metallurgies.

Job-related areas	Metal-lurgical topic	Job-related situations	Skills
4. Travel on Professional Purposes	Metals	<ul style="list-style-type: none"> ● railway station; ● airport; ● travel agency; ● on train, boat, plain; ● at a hotel, bank, restaurant, of- fice, etc. 	<ul style="list-style-type: none"> ● implementation formalities during the journey; ● making enquiries, reservations, orders and bookings, etc.; ● finding and understanding information while travelling (schedules, Web pages, announcements); ● declaring cargo on the custom.
5. International Conferences	Alloys	<ul style="list-style-type: none"> ● before conference; ● during the conference; ● after the conference. 	<ul style="list-style-type: none"> ● preparing the report; ● analyzing the competitors; ● presentation report; ● negotiating; ● communicating with stakeholders; ● signing the contract; ● discussing the advantages and disadvantages of the event.
6. Interna-tional Meet-ings and Discussions	Cast Iron	<ul style="list-style-type: none"> ● before meeting and discussing; ● during meeting and discussing; ● after meeting and discussing. 	<ul style="list-style-type: none"> ● making arrangements; ● talking on professional topics; ● engaging in discussion; ● taking minutes of a meeting; ● socializing; ● reporting on a meeting; discussion.
7. Health and Safety	Metallurgy of steel	<ul style="list-style-type: none"> ● emergency; ● occupational safety; ● at the doctor's, chemists. 	<ul style="list-style-type: none"> ● understanding health and safety rules and regulations; ● dealing with instructions and notices; ● locating specialized information in a variety of sources.
8. Con-tracts and Agree-ments	Nonfer-rous met-allurgy	<ul style="list-style-type: none"> ● cooperation; ● service agreement; ● insurance; ● partnership; ● cooperation. 	<ul style="list-style-type: none"> ● understanding contract details; ● negotiating contracts; ● providing promotional slogan of the company or product;
9. Industry unit. Infor-mation	Heat treat-ment of metals	<ul style="list-style-type: none"> ● performance; ● structure; ● products / services, perfor-mance, etc. ● personnel; ● policy. 	<ul style="list-style-type: none"> ● describing working place; ● telling about the plant's structure; ● outlining the general duties; ● briefing on health.
10. Products and Services	Corrosion and metal protec-tion	<ul style="list-style-type: none"> ● sales; ● purchases; ● claims; ● complains. 	<ul style="list-style-type: none"> ● returning the products; ● giving the list of services provided by the company; ● expressing satisfaction / dissatis-faction with the product / service; ● challenging the agreement with a partner.
11. Ad-vertis-ing	Foundry	<ul style="list-style-type: none"> ● advertisement; ● announcements; ● publicity. 	<ul style="list-style-type: none"> ● making advertising; ● presentation your product /service; ● discussing the project of advertise-ment / announcement.
12. Profes-sional and academic issues	Rolling	<ul style="list-style-type: none"> ● at the workplace; ● workshops and tutorials; ● future profession «Metallurgical Engineer»; 	<ul style="list-style-type: none"> ● dwelling about your future profes-sion; ● locating information in various sources; ● speaking for academic purposes.

Selected topics will determine the lexis to be used. The lexis was selected according to the following principles:

- 1) feasible and accessibility (should correspond to the level of cognitive development of the students);
- 2) frequency and prevalence (frequency of use professionally oriented materials and communicative situations within the topic);

3) the communicative needs (be the basis for generating own communicative utterances);

4) necessity and sufficiency (clear definition of the selected items that meet most educational goals and objectives) [2]. Additionally we offer to include:

5) the principle of optimal coverage of basic concepts and major special English-language term course of professional discipline (allows you to teach effectively students both in content and in terms of language);

6) integration al principle (selection of materials on terminological units, based on the knowledge) gained from the relevant disciplines, such as «Introduction to the profession», «Fundamentals of metallurgical shops», «Ukrainian language (for professional purposes)», etc.

To the selection of lexical items based on the principles and criteria devoted a lot of attention, but the problem of the selection lexical items focused on metallurgy remains unsolved. Summarizing the existing researches of the selection of English vocabulary, we define the following criteria:

1) the topic criteria;

2) the criteria of frequency;

3) the criteria of availability or expediency;

4) the criteria of functionality;

5) the criteria of functional feasibility. Let us consider each of these criteria in more details [7].

The topic criteria. According to the topic criteria, lexical units are allocated to the sub-themes, grouped by thematic feature that allows you to build association field, situational vocabulary related groups that promote learning and remembering vocabulary [9]. This criteria of selection professional vocabulary is focused on the goal of learning in the technical university and is comprehensive. According to it, lexical items should be distributed on the topics according to the curriculum. Featured lexical units of active vocabulary must not only meet the specified topic, but also reflect its most important concepts. For example, on the topic «Corrosion and metal protection» studied such lexical items, as: *scaling, cavitation, erosion, pitting*, and so on.

The criteria of frequency. According to this criteria, selected the most commonly used words and phrases of metallurgical industry. It operates on the basis of statistical evidence and makes it possible to determine the quantitative characteristics of lexical items, select the most commonly used in professional speech. The most useful words for the learners are those which are frequent and occur across a wide variety of texts. For quantitative adopted limits to the number of occurrences from 3 (lower limit) to five on a page of a journal or text book But sometimes the most essential lexical unit in communication is not always the most frequent.

The criteria of availability or expediency. The lexical items must be selected from the texts connected with the student's future profession. Speaking aimed at obtaining semantic information. **The criteria of availability** allows to select terms from the course material, provides students with information that contributes to further use in communication. From the content of the text depends the effectiveness of training activities by understanding semantic information and results processing and mastering terminology vocabulary when it used in the statements of students.

The criteria of functionality. Under the criteria of functionality lexical units we mean a set of basic linguistic features of lexical items. Its components are stylistic neutrality, compatibility, semantic value, ambiguity and word-building ability. We consider it appropriate to combine these components into one, because the selection of professionally oriented vocabulary is often difficult to determine which criteria is taken from a word or phrase, there is a lack of clear boundaries between the linguistic features of lexical units. A combination of all these criteria makes it complete and undividable.

Functional feasibility criteria requires consideration in the selection of educational material linguistic features of speaking – dialogical and monological speech and the selected material under an informal conversational style of speech, including characteristics such as concreteness, emotionality, subjectivity, economy, etc. In terms of verbal directional selection vocabulary skills to create professional speaking should

take into account linguistic features of speech, its informative, expressive and communicative function, and taking into account the difficulties faced by students while learning foreign language.

So, in the article, we revealed the selection vocabulary of English metallurgical terminology. Software requirements analysis helped to define the range of topics and professional situations and skills necessary for the implementation of professional activities. The prospect for further research is forming a vocabulary of lexical items of metallurgy according to the described principles and criteria for selection of educational material.

Bibliography

1. Benjamin A., Crow J. T. Vocabulary at the center. Larchmont, NY : Eye On Education. – 2010.
2. Borysko N. F. Otbor i raspredelenie uchebnogomateriala v uchebnicaxpoinostrannomyyaziku // Lingvopacs. – 2001. – № 5. – P. 287–294.
3. Common European Framework of References for Languages: Learning, Teaching and Assessment / main editor prof. Nicolaeva S. Yu. – 273 p.
4. English for special purposes. National Curriculum for Universities / main editor prof. Nicolaeva S. Yu. – Kiev, 2005. – 133 p.
5. Harmer J. How to teach English: an introduction to the practice of English language teaching. – Essex: Pearson Education Limited, 2003. – 198p.
6. Lessard-Clouston M. Vocabulary Learning and Teaching: Pedagogy, Research, and Resources // Christians in English Language Teaching (CELT 2012). Conference Teaching With Excellence Strand. – Chinese University of Hong Kong. Hong Kong, China – 2012.
7. Liu Yan. Reform Attempts in Teaching Methods on Metallurgical Technology Professional English / Yan Liu; Yan Wang; Liying Li; Lina San // Education Technology and Information System. Atlantis Press, 2013. – P. 1035–1038.
8. Nation I. S. P. Teaching vocabulary: Techniques and strategies. Boston, MA : Heinle. – 2008.
9. Peres M. L. Authenticity in the Teaching of ESP: an Evaluation Proposal // Maria Luisa Peres; Ana Almagro. Published by SDTUTSJ.– 2005.
10. Thornbury S. How to teach vocabulary. Harlow, U. K. : Longman. – 2002.
11. Thornbury S. Howto Teach Speaking / Scott Thornbury. – Essex : Pearson Education Limited, 2005. – 156 p.

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