

Отримано: 10 лютого 2024 р.

Прорецензовано: 28 лютого 2024 р.

Прийнято до друку: 8 березня 2024 р.

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Web of Science Researcher ID: S-7760-2017

DOI: 10.25264/2519-2558-2024-21(89)-35-38

Stepanechko O. V. The value of thematic thesaurus on the acquisition of English for Specific Purposes by University students. *Наукові записки Національного університету «Острозька академія»: серія «Філологія»*. Острог : Вид-во НаУОА, 2024. Вип. 21(89). С. 35–38.

УДК: 371.31:004

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THE VALUE OF THEMATIC THESAURUS ON THE ACQUISITION OF ENGLISH FOR SPECIFIC PURPOSES BY UNIVERSITY STUDENTS

As scientific and technological progress continues to evolve, educational institutions need to adapt their methodologies and resources to meet the changing demands of the modern world. The article addresses the importance of terminology acquisition, focusing on the development of professional English skills for higher education students pursuing degrees in mathematics, computer science, and information technology. It is emphasized that the better the selection and methodological classification of professional material used in the educational process is made, the more successful the study of foreign language terminology following students' professional training and, consequently, the formation of their foreign language lexical competence. The author proposes a systematic approach to teaching terminology through the compilation of thematic thesaurus of IT, computer science, and mathematics terms. The article outlines three phases of learning terminological vocabulary based on English professional texts; the terms at each level are processed through exercises that are described that can help students master professional vocabulary within the course "English for Specific Purposes". Through a combination of traditional and modern teaching methods, the author suggests that students can acquire terminological vocabulary and comprehension to succeed in their future professional fields. The researcher states that a strong foundation in professional terminology is vital for students' language and professional competencies development.

Key words: term, terminological system, thesaurus, terminology acquisition, semantization, English for Specific Purposes.

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ЗНАЧЕННЯ ТЕМАТИЧНОГО ТЕЗАУРУСУ ДЛЯ ВИВЧЕННЯ АНГЛІЙСЬКОЇ МОВИ ЗА ПРОФЕСІЙНИМ СПРЯМУВАННЯМ СТУДЕНТАМИ ВИЩИХ НАВЧАЛЬНИХ ЗАКЛАДІВ

У статті розглядається важливість оволодіння термінологією в галузі вищої освіти, при цьому особлива увага приділяється розвитку професійних навичок англійської мови у студентів, які здобувають освіту в галузі математики, комп'ютерних наук і інформаційних технологій. Автор зосереджує увагу на необхідності викладання спеціалізованої лексики для цих студентів, щоб відповідати вимогам сучасних освітніх стандартів та швидкому розвитку науково-технічного прогресу. Запропоновано системний підхід до навчання фахової лексики через укладання тематичного тезаурусу термінів із математики, інформаційних технологій та інформатики. Спираючись на низку наукових праць з термінології, лінгвістики та лексикографії, у статті окреслено етапи створення тезаурусу та наведено практичні приклади вправ і завдань, що можуть бути використані для засвоєння студентами професійної лексики англійською мовою. Завдяки поєднанню традиційних і сучасних методів навчання, таких як контекстуальна здогадка, семантизація та інтерактивні онлайн-інструменти, студенти мають змогу засвоїти необхідний термінологічний словниковий запас для досягнення успіху в майбутній професії. Автор стверджує, що міцний фундамент професійної термінології необхідний студентам для розвитку їхніх мовних і професійних компетенцій та ефективного професійного розвитку.

Ключові слова: термін, терміносистема, тезаурус, засвоєння термінології, семантизація, англійська для професійних цілей.

The two fundamentals of any foreign language are vocabulary and grammar. Based on these core components, learners are able to develop four language skills: reading, writing, listening, and speaking. Teaching young adults in higher institutions, we deal with students who have a school basis of grammar and general English vocabulary. And the task of the University tutor is to boost their school knowledge as well as develop new vocabulary and skills in professional English because following the requirements of the new educational standards, in the process of teaching a foreign language in a higher education institution, is necessary to take into account the professionally oriented component of students' foreign language training, which involves knowledge of terminology and the ability to use it to solve professional and academic tasks.

The article aims to find out the optimized ways of terminology acquisition with the help of thematic thesaurus and related materials; and to study the methods and techniques of teaching and activating specific terminology while learning a foreign language.

Scientific and technological progress makes significant changes in the linguistic model of the world through the emergence of new terms and terminology systems. This necessitates the codification and systematization of terminology and, accordingly, leads to the need to publish dictionaries of professional terminology systems and theoretical developments on their compilation.

A term is a word or phrase that is the name of a scientific or technical concept and its definition (Vakulenko, 2013). Thus, a term is a special emotionally neutral word or phrase adopted in a certain professional field and used in special conditions. Terminology (as a set of terms) is an autonomous sector of any national language, closely related to professional activity. The terms of each branch of science form their own systems (Vakulenko, 2009). Some discussion questions, such as belonging of the terms to one or another field of study, equivalent translation without loss of meaning, and appropriate to the particular content are the research studies of scholars.

Terminology as a subject of study was thoroughly examined by linguists V. Arseniuk, M. Vakulenko, O. Ivanova, V. Ivashchenko, V. Karaban, D. Lotte, L. Poliuh, L. Symonenko, N. Toma, R. Fisher, and others. Also, it was studied in the context of methodology

as an object of the learning process in the course of “English for Specific Purposes” (ESP) by K. Dehtiarova (teaching terminology to non-linguistic students, 2022); O. Ivanova (teaching terminology for technical students, 2018); V. Kul’ko (learning terminology by ecology students, 2013); Yu. Semenchuk (terminological exercises for economic students, 2004); V. Tymkova (terminological acquisition by future economists, 2022); M. Telychko (teaching terminology for hotel and restaurant business students, 2020); T. Hutchinson and A. Waters (English for Specific Purposes, a learning-centered approach, 1987).

The problem of learning terminological vocabulary has been and still is relevant in modern methodological science. Thus, the acquisition of terminology by computer science and IT students has not been the object of the research yet. Terminological vocabulary is necessary for students, first of all, to read authentic texts in their specialty to obtain professional information, as well as to conduct professionally-oriented communication.

Terminology occupies a prominent place in the professional vocabulary of any highly qualified specialist. The huge and rapid pace of technological progress has a significant impact on the language people operate. New terms appear in every sphere yearly even monthly. To keep in touch with the development, future specialists should be acquainted with the vocabulary of the profession they are preparing for.

It is worth mentioning that terminology as the basis of foreign professional language plays an important role in the formation of language and professional competence of students, helping them to acquire the qualifications of programmers and data analysts of the appropriate level.

The staff of the Department of Foreign Languages for Mathematical Faculties take a comprehensive approach to the issue of students’ learning of professional English. The ESP curricula developed by the department’s educators are content and information related to the disciplines of students’ professional training, aimed at systematizing their knowledge and developing communicative competence in the areas of English-language professional communication. To ensure that students of the Faculties of Mathematics, Computer Science, and Information Technology learn and understand the terms properly and use them in their work, the instructors of the Department of Foreign Languages for Mathematical Faculties have decided to conduct applied research and compile a thesaurus of mathematics, IT and computer terms within the framework of the department’s research work. This research will be useful for students not only for professional English classes but also for understanding the material in their professional disciplines.

Based on the study of approaches to phased work on the creation of terminology dictionaries, we have identified the following sequence of stages that we follow when working on the English-Ukrainian and Explanatory Thesaurus for Mathematics, IT, and Computer Science:

- 1) researching the needs of the target audience (students of mathematics, information technology, computer science, and cybernetics faculties); determining the characteristics and structure of the dictionary; analyzing articles from foreign explanatory dictionaries;

- 2) compiling a register of terms (selecting vocabulary from textbooks and authentic ones) defining them in English and translating them from English into Ukrainian;

- 3) designing dictionary entries, organizing the dictionary;

- 4) clarifying the meanings of certain terms by experts in the fields of mathematics, information technology, and computer science, and editing the data obtained.

As lexicography arose from the practical need to explain incomprehensible words, the subject of lexicography is the collection of words, their systematization, and the description of vocabulary material (Ivanova, 2017: 9). Lexicography is closely related to lexicology, as compiling dictionaries requires a thorough theoretical knowledge and a good sense of language, i.e. understanding the nuances of a word’s meaning, the peculiarities of its usage, and its compatibility with other words (Ivanova, 2017: 10). Therefore, working on a dictionary entry requires special attention and a careful approach to its compilation as certain terms are intertwined with other fields or have their specific meanings in these areas, so they require careful attention to the definition, selection collocations, and examples from articles in the field of study, that they illustrate the term even better and complement its meaning. Sometimes, not to be confused with the meaning, language teachers need to be consulted by the specialists in this field for a clear understanding of the correctness of the meaning and its use in order to avoid providing inaccurate information. After all, the importance of interdisciplinary connections in the process of learning ESP is undeniable.

The purpose of each dictionary entry is to provide students with comprehensive and at the same time accessible information about a terminological unit so that when they get acquainted with the concept of “term”, its main features and characteristics, they understand what distinguishes it from ordinary words, namely: unambiguity, accuracy, brevity, neutrality, systematicity, and simplicity. Moreover, the definition should accurately reflect the state of the contemporary language, despite the rapid pace of technological progress and information obsolescence.

One more issue we face compiling a thesaurus, whether it will be academic British English or World English, and following the first stage, mentioning “researching the needs of the target audience” who draws information from the Internet, and, accordingly, from all over the world, we decided to present the material in World English.

As practice shows, at the initial stage of learning ESP, students are more interested and productive in working with the terminology of modern texts of popular science or periodicals in their field of study. Therefore, the compilation of the thesaurus has to be based on the ground of the terminology of these materials and should be carried out in stages with strict adherence to the compilation strategy and the number of stages, which have minor differences among scholars (S. Hryniiov, B. Shunevych, M. Telychko, etc.).

Regarding the course “English for Specific Purposes,” we focus on the specific vocabulary, presented in our thesaurus and related to the field of our learners’ future work. If the course material is professionally interesting to the student, it will ensure one’s successful work on the development of relevant professionally oriented foreign language skills. The material of this course is also practical, as learners need information that can be immediately applicable to their professional needs and meet their expectations. Students are eager to be taught about things that will be useful to their future work, expect to have immediate results, and seek a course that will be worth the development of specific language skills, professional vocabulary, and real job situations they can discuss and evaluate.

Therefore, the vocabulary list or even a dictionary of professional terms (thesaurus) is a beneficial component of the course “English for Specific Purposes” which enables students to master vocabulary and understand the meaning of terms and their application in work situations and documents.

The lexicographic competence of the student is the basis of their comprehension of the professional language and clear distinctions of different meanings of the terms. According to experts’ opinion, a specialist’s successful review of specialized material is possible only if one knows 75-80% of professional terminology.

Taking into account the complexity and versatility of both the concept of the “term” itself, as well as the problems of its translation a teacher of ESP is faced with the need to organize a learning process that would create the most effective conditions for learning professional terminology (Telychko, 2020: 35). It’s also important to maximize the advantages of such thematic dictionaries and address all the learning challenges in vocabulary acquisition including the terms and their definitions in the tasks at all stages of different activities, such as pre-reading and listening, preparation for speaking, after-reading or listening.

At the initial stage of working with the ESP course material, preparatory exercises and tasks to familiarize students with professional terminology play an important role, where the teacher can use such techniques as stimulating contextual guessing, semantization of new vocabulary in a translatable way (definition by the native language equivalent, translation interpretation, language guess) and a non-translatable way (determining the meaning of a word, determining the meaning based on word-formation models, synonyms or antonyms).

The examples of tasks for this stage could be: matching the terms with the definitions (designation of the meaning); filling in the gaps in the sentences with the terms from the box (stimulation of contextual guessing); grouping or classifying the terms in accordance with their characteristics (semantization); selecting the terms from Thesaurus related to the specific topic and comparing the outcomes with groupmates, giving arguments for such choices (semantization of new vocabulary); making the list of the topic terms in mother tongue and their translation with the help of Thesaurus (translation equivalent); finding the definition of the highlighted words from the text in Thesaurus (defining the terms).

High-quality language training for students is impossible without the use of modern educational technologies (Ivanova, Zhurba, 2013: 193). In terms of synchronous distance learning, we also use internet resources for studying new vocabulary in the specialty among which the online tool www.wordsearch.com deserves our special attention. With the help of this resource, students identify, acquire, and memorize the terms on a designated theme. An example of such a task is presented below: Follow the link and find words in the word search.

<https://thewordsearch.com/puzzle/5525402/jobs-in-computing/> Also, students can compile a list of the related to the topic terms using the application Quizlet.com which trains their pronunciation skills and drills the vocabulary to memorize it, suggesting such tasks as matching, multiple choice testing, writing, etc.

Mastering the terminology at this stage helps to expand students’ background professional knowledge, focuses them on the correct understanding of the text, and activates their further thinking and speaking activities.

At the textual stage, terminology acquisition occurs during an analytical reading with attention to the combinability of terms and collocations with them, and the meaning of the term is better revealed through examples and professionally oriented situations described in context (Kulko, 2013). The goal of the text exercises is to orientate students to search for and perceive certain information in the text, as well as to automate actions with terminological vocabulary. Therefore, we apply text-based tasks in the ESP classes for consensual term acquisition, among which we can distinguish: the recognition and highlighting of terms in the text with their subsequent definition and grouping; building associations and defining terminological collocations based on the context; reading for specific information and filling in the gaps; finding the mistakes related to the use of inappropriate concepts and terms; producing their own texts based on what they have read, such as making annotations, summaries, etc. When working on a professionally oriented text or video content, it is advisable to use a thematic Thesaurus containing the terms of a particular specialty with the translations and definitions provided. This makes it possible not only to systematize knowledge but also to facilitate its assimilation. Moreover, the texts provided meet such requirements as the relevance and novelty of scientific information in the specialty, its professional and practical orientation, accessibility of the material, and the presence of a problem to be discussed or solved.

The consolidation of terminological units at the post-textual stage can take place in different ways: discussion of the text, answers to questions requiring understanding of the terms, tasks to determine the reliability of the information, correction of mistakes, dialogue modeling of professional activities using appropriate vocabulary, role-playing games, preparation of the list of terms in this field of study with quizzes, puzzles, etc. (Dehtiarova & others, 2022). Such exercises stimulate students to communicate about the issues of the text using terms, help them to summarise facts, and critically analyze what they have read. Sometimes they are stimulated to search for more information to formulate their arguments and evidence. The objective of the post-text exercises is to check the level of understanding of the terms and to enhance their use in further activities, such as discussions, debates, and role plays that might be applied in future professional real situations.

To conclude, we can state that the learning of professionally oriented terminology by students majoring in mathematics, computer science, and IT should be consistent and systematic. As a rule, the ESP course is organized in such a way that the acquisition of terms occurs in the process of working on specialized texts or videos. The regularity of this type of work ensures the gradual mastery of a certain professional terminological system.

The level of students’ terminological competence as the basis of their professional competence will determine the speed and quality of processing scientific and professional resources, and the efficiency and effectiveness of business communication. By focusing on a thematic thesaurus creation and the implementation of efficient teaching methods, teachers can support students in mastering specialized vocabulary and its application in their field of study. The systematic approach outlined in our research emphasizes the significance of building a strong foundation in professional terminology to improve language and professional competencies. Through knowledge and practical application of the terms provided in the thematic Thesaurus, students can easily navigate their academic and professional environments and contribute to the advancement of their soft and hard skills.

For further scientific research, we would like to investigate the impact of digital tools and learning platforms on teaching and acquisition of specialized vocabulary compared to traditional methods.

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