

The development of lexical competence with the help of authentic means

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Abstract: Today, teaching English for Special Purposes (ESP) is becoming one of the important aspects of foreign language teaching networks. The development of scientific and technological progress, in the information age, creates the need to apply the experience of developed countries of the world to train globally competitive personnel. In this regard, research on the development of lexical competence based on real materials in teaching foreign languages for special purposes is increasing. Authentic materials are all things in the material environment that surrounds us. In teaching English for special purposes, we can see authentic materials as all the details encountered in professional processes, all the actions performed in work activities. This article reflects the results of research on the formation of a methodological system based on authentic materials in teaching English in non-philological higher educational institutions. In addition, detailed considerations are given about the relevant stages of the systems.

Keywords: lexical competence, authentic material, support, terms, terminology, contextualization, interactive, assessment, authenticity

Introduction. This research paper discusses in detail the issues of developing lexical competence in teaching English for special purposes. The basis of teaching English for special purposes is an educational process based on teaching a minimum of terminology for the specialty, developing the English language environment in professional processes. In this, one of the most important factors is to take into account the educational needs of students and the conditions of the communication environment used in professional activities. Lexical competence is a type of competence that determines the vocabulary of the language being studied, the correct use of words, understanding the occurrence of terminological units in context, understanding their meanings, and the criteria for using language units in communication. In this regard, J. Richards (1976) was one of the first among applied linguists to put forward the concept of “word knowledge” about lexical competence. In his opinion, this concept includes the following (Figure 1.1):

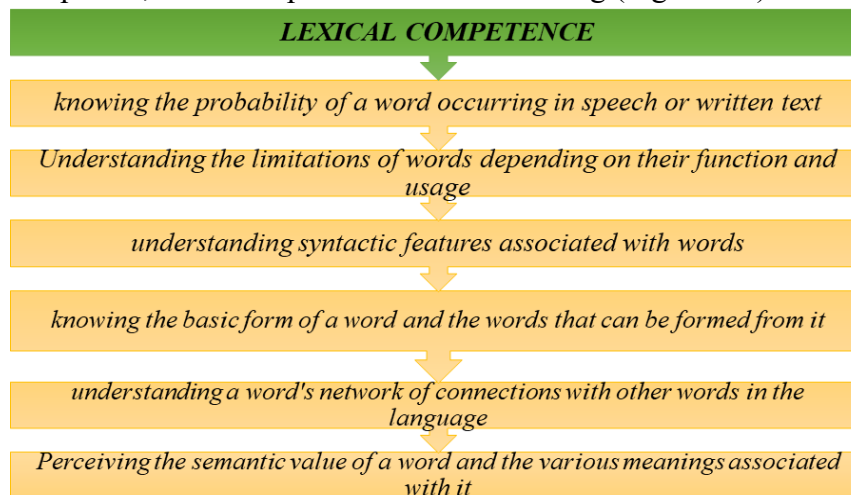


Fig.1. The relationship of lexical competence to words [1].

From this it can be understood that lexical competence is important for understanding the place of a word in speech, its areas of application, syntactic principles, form and content, and the specific features of word units in general context. Lexical competence in non-philological areas is interpreted as the main factor regulating terminological units and their application in the field. The viability and relevance of materials in these processes serve to increase students' knowledge. Accordingly, it is appropriate to emphasize their authenticity in the preparation and presentation of materials. Authentic materials are non-pedagogical tools, they are real-life objects outside the classroom that have not been pedagogically processed and are not adapted to educational activities. The use of these materials helps students adapt to professional life and increase the coherence of education and practice.

Literature review. 1.1. Scientists such as L.Antoni(2018) on the issues of teaching English for special purposes in countries around the world, S.Bлагоjević(2013) on the use of original texts as authentic material, H. Basturkmen(2021) on the formation of materials and instructions in teaching English for special purposes, L.L.Alfa(2020) on the use of podcasts as authentic material to develop students' speaking skills, P.S.Rao(2022) on the use of authentic materials in teaching English as a second and foreign language, A.Gilmore(2007) on authentic materials and authenticity in learning foreign languages, and V.Rowena(2020) on the integration of language skills and authentic materials in teaching English for special purposes have conducted research.

1.2. The works of such scientists as T.Dolidze and N.Doghonadze(2020) on teaching English for special purposes using authentic materials using ICT, N.V.Devdariani, E.V.Rubtsova(2020) on the role of authentic video materials in teaching listening skills, N.V.Tomashuk(2023) on the role of authentic materials in teaching foreign languages, as well as A.Baymakhanova(2013), N.A.Gridneva(2023) on the use of authentic materials in teaching a foreign language to lower-level students, and A.I.Shvedak(2023) on the essence of the concept of "authentic materials" in the context of teaching a foreign language were studied and analyzed.

1.3. Among the prominent scientists in our country, there are scientific works on teaching foreign languages by J.J.Jalolov(2012), T.K.Sattarov(2000), G.T.Makhamova(2017), I.M.Tukhtasinov(2018), M.A.Berdieva(2009) and other scientists.

1.4. A number of studies related to the practical application of authentic materials in teaching English to university students were also studied. In particular, in the works of Z.Abdialimova, Kh.Muhitdinova(2023), P.Kh.Omanov(2023) on the role of authentic materials in the development of socio-cultural competence in students, B.B.Juraboyev(2021) on the use of English authentic materials in lessons, D.Umirova(2020) on authenticity and authentic materials: their history and present day, these issues have been scientifically and theoretically studied.

The need to conduct research on the transition to person-centered education in teaching English for Special Purposes, the development of lexical competence in students of non-philological higher educational institutions through authentic materials, and the implementation of a student-centered approach based on reality-based methods determined the topic of our research.

Methodology. Nation (2001) argues that word knowledge, or in other words, lexical competence, includes three types of knowledge:

- *knowledge of form - spoken form, written form and parts of speech;*
- *knowledge of meaning - form and meaning, concepts and referents and associations;*
- *knowledge of usage - grammatical functions, combinations and restrictions on use[2].*

The term "use of authentic materials" in the study of foreign languages is a concept that has appeared much earlier, and Henry Sweet (1899) has been widely recognized as a scientist who

worked in this field in the 19th century. He regularly used authentic materials in his work and repeatedly emphasized their advantages over pedagogical materials. He explains the superiority of real, idiomatic texts over artificial “methods” or “series” by the fact that they fully reflect every feature of the language. The scientist also expresses the opinion that artificial systems tend to constantly repeat certain grammatical structures, certain elements of the vocabulary and word combinations, while almost completely ignoring other equally important or even more important elements. In non-philological areas, English teaching involves emphasizing terminological units. Developing students’ lexical competence through authentic materials requires providing real-world materials, integrating authentic materials, using methodologies that enhance communication skills, and selecting authentic materials that are appropriate for students’ learning needs.

Afghan scholar Meena Sadam(2022) argues that the main purpose of authentic materials is to engage students in classroom discussions and to provide them with opportunities to apply real-life situations. She argues that English language learners should be able to use the language freely in a live environment outside of the classroom. English language teachers are looking for materials that will benefit students in real life (outside the classroom). In the 21st century, teachers do not base their lessons solely on textbooks. This is because textbooks are artificial materials created for the sole purpose of teaching. Authentic materials serve as a good alternative or additional resource to textbooks. Teachers are striving to incorporate authentic materials into their lessons. Therefore, the use of authentic materials remains a primary tool not only for educational needs, but also in socio-professional aspects. This is not only in English language teaching, but also in all fields with the development of information technologies, which is increasing its importance.

Results. When it comes to developing lexical competence in English in non-philological areas based on authentic materials, the most important issue involves collecting and systematizing the base of terminological units. Because the language needs of representatives of a particular field are directly based on understanding the terms of their field in English. These needs are directly acknowledged by industry specialists and teachers of professional fields, especially the importance of terminological dictionaries.

Dictionaries of industry terms are a very important methodological tool for specialists in their professional activities. Let’s dwell on some of them. The “English-Russian-Uzbek Dictionary of Terms for Architectural and Construction Specialties”, prepared by M.B.Allanyazov(2021), senior lecturer of the Department of “Foreign Languages” of the Academy of Sciences, contains 2,106 thousand terms on design, soil mechanics, elasticity theory, construction physics, engineering geology, hydrology, architecture, typology of buildings and structures.

The “English-Russian-Uzbek Dictionary of Computer Science” authored by D.I.Volkoviskaya, A.Peremkulova, and M.Kh.Khakimov(2005) contains about 2,000 term units in addition to more than 1,900 terms. The separate listing of term units makes it easier for users to understand the terms.

The “Explanatory Dictionary of Information and Communication Technologies”(2004), produced by the joint “Digital Development Initiative” Program between the United Nations Development Program and the Government of the Republic of Uzbekistan in cooperation with the Coordinating Council for the Development of Computerization and Information and Communication Technologies and the Agency for Communication and Informatization of Uzbekistan, was prepared in a spirit of professionalism. A notable aspect of it is that it includes definitions and explanations for more than 3,000 terms and concepts, as well as a lot of additional information used in this field in the form of appendices.

The “English-Uzbek-Russian Anatomical Dictionary” prepared by A.Kasimova and M.Kasimova(2006) contains a collection of definitions and translations of more than 4,500,000 anatomical concepts based on the terms adopted at the World Congress of Anatomists in Paris in 1955.

Discussion. During our research, we regularly held meetings with teachers of specialized subjects and representatives of the field in teaching English in the field.

It is worth noting the importance of interdisciplinary relations in the use of authentic materials in the teaching process. It is necessary to take into account the fact that one subject can be supplemented with elements and facts from other subjects when determining the content of education. In this regard, of course, there was a need to form an important terminological base in the development of lexical competence. In the course of our research, taking into account the needs of leading scientists and production workers in the field of energy, we developed the 1st edition of the Uzbek-English-Russian terminological dictionary “Energy Lexis” in co-authorship with a specialist in the field, a leading energy scientist G.N.Uzokov and a dissertation student Sh.Yu.Tokhirova(2024), which contains English energy terms. In it, 12 separate branches of the energy sector are thematically divided into sections. Each topic is presented in the form of a separate dictionary in alphabetical order, and in a rounded form, it contains more than 1,800 terminological units. The terms in this dictionary are collected from the most necessary units found in production enterprises, experimental sites, and academic publications with the help of industry representatives and presented in the form of a dictionary.

The dictionary was created by the Decree of the President of the Republic of Uzbekistan (No. PF-60 dated January 28, 2022) as part of the implementation of tasks such as ensuring energy security, saving traditional energy resources, and introducing “green economy” technologies in all sectors within the framework of the Strategy for the Development of New Uzbekistan for 2022-2026 and the State Program for its Implementation[9]. Each word and phrase in the dictionary was compiled taking into account the opinions of specialists directly involved in production, and lexical units are given with translations from Uzbek language into English and Russian.

It can be seen that all sections are arranged separately in the dictionary in this way. It is worth recognizing that this dictionary has shortcomings. It does not separate the terms by word groups, does not provide examples of use. It simply collects authentic lexical units and provides translations in two languages. It would be appropriate to develop an English-Russian-Uzbek version of the dictionary. Nevertheless, energy specialists have received it very positively and are widely using it. Work is underway on the dictionary. In the future, we intend to prepare a 2nd edition that will fill the above shortcomings. Today, with the development of information technologies, it is planned to develop various electronic and mobile versions of such dictionaries.

In this study, we have organized a teaching and methodological support system for the development of lexical competence based on the theory of using authentic materials. As noted in previous chapters, this theory involves the use of texts, audio-visual aids and objects that are found in real professional and personal life in teaching English. We believe that this will allow students to understand and freely use English in a real-life environment. According to the British Council’s methodological recommendations (descriptors) for the project “Teaching Subjects in English” (EMI)(2022), the main components of using authentic materials include material selection, contextualization, interactive exercises, assessment and feedback. It is worth recognizing that this content is relevant for all subjects and forms of education in general. It is advisable to organize the process of teaching English for special purposes as follows.

As mentioned, the selection of materials is the most important and leading factor in the use of authentic tools. The selection of materials, taking into account the extent to which they cover educational needs, ensures their effectiveness. Selected sources can also be presented in the form of *everyday objects, the media world and the Internet, easily accessible websites, and the types of materials* can be presented in purely authentic or reflecting authenticity. Interactive exercises, as an integral part of every modern educational process, can be presented in the form of topics based on primary information for independent work, or in the form of the latest achievements of information technology - interactive networks. In terms of observing and assessing the extent to which students master the presented material, formative assessment should include information about *people, context and goals*. That is, it is advisable to take the main content of the assessment from real-life tools that clearly indicate who, what and for what purpose it is being provided.

We aimed to form a teaching and methodological support system for the development of lexical competence using authentic means in English lessons in non-philological areas, which combines the components of the above-mentioned authenticity theory in an improved form, in the following 3 stages:

1. Reproductive stage - this stage, based on S.Krashen’s “Input hypothethis”[11], involves studying lexical units in context, identifying their synonyms and antonyms, understanding their meaning through visual means, understanding compounds in context using authentic media materials, and mastering the understanding of specialized terms by listening to audio files and podcasts;

2. The productive stage is a stage based on the use and consolidation of the vocabulary acquired according to the “Output hypothethis” of M.Swain (2000)[12] and B.Laufer., J.Hulstijn (2001)[13], in which students independently create texts, complete sentences with special terms, create authentic situations through role-playing games, express their opinions in round tables, and prepare presentations;

3. The integrative stage is a process aimed at freely using the acquired lexical wealth in real life, which G.Widdowson(1978) interprets as a practice that involves implementing the “Interaction hypothethis” in a form that is as close to real life as possible. This stage can be organized by writing scientific articles, resumes, project work, newsletters, blog posts, participating in online conferences and forums, analyzing authentic material and recording one’s own speech.

It would not be an exaggeration to say that the goal of introducing a teaching methodological system based on these stages in English lessons in non-philological areas is to prepare students for the study of sectoral lexical units through real tools and to prepare them for adaptation to the English language environment in their professional lives.

We found it necessary to present the following schematic system for the effective use of methodological support in all sectoral English lessons (Table 1.1).

Table -1.1

A methodological support system aimed at developing lexical competence based on authentic materials in teaching English for specific purposes

Stage 1. Introduction	
Task 1	<i>a) Authentic visual/audio/object material is presented; b) Questions are asked through the “Brainstorming” method and are related to the topic of the lesson.</i>
Task 2	<i>a) Present a passage from an authentic text and find 4-5 terms related to the specialty;</i>

	<p><i>b) Translate the terms you find, make sentences;</i></p> <p><i>c) Identify synonyms, antonyms, and English definitions.</i></p>
Stage 2. The main part	
Task 3	<p><i>a) Lexical presentation: familiarization with the material presented on the basis of authentic means:</i></p> <ul style="list-style-type: none"> <i>-slide;</i> <i>-video;</i> <i>-technical details;</i> <i>-podcast;</i> <i>-website links;</i> <i>-newspaper ("New York times", "National geographic")</i> <i>-layouts</i>
Task 4	<p><i>Working in pairs, briefly describe the main content of an authentic text:</i></p> <ul style="list-style-type: none"> <i>-write a short explanation;</i> <i>-create a dialogue;</i> <i>-formulate a question.</i>
Task 5	<p><i>Interactive exercises on the topic:</i></p> <ul style="list-style-type: none"> <i>- role-playing;</i> <i>- round table discussion;</i> <i>- solving cases;</i> <i>- karaoke;</i> <i>- dubbing.</i>
Stage 3. The final part	
Task 6	<p><i>Based on the materials covered in the lesson:</i></p> <ul style="list-style-type: none"> <i>- Question creation;</i> <i>- Test creation;</i> <i>- Tests in the HEMIS assignment system;</i> <i>- Online exercises on "kahoot it" and other platforms;</i>
Task 7	<p><i>Mutual participation assessment:</i></p> <ul style="list-style-type: none"> <i>-SWOT analysis ("Strength"; "Weakness"; "Opportunity"; "Threat")</i>
Task 8	<p><i>Reflection:</i></p> <ul style="list-style-type: none"> <i>-What was learned in the lesson (the "BBB" (I knew, I want to know, I learned) method);</i> <i>- Giving "feedback" (personal opinion) about the lesson</i>
Task 9	<p><i>Integrative stage - based on the topic covered:</i></p> <ul style="list-style-type: none"> <i>- Project preparation;</i> <i>- Infographic creation (napkin.ai, mindmap.ai, canva);</i> <i>- Presentation (PPT, gamma app);</i> <i>- Filling out online forms;</i> <i>- Completing independent work assignments</i>

Of course, this system should be based on a curriculum and syllabi that are fully informed by the educational needs of students. In our previous research, we have argued that such curricula should encompass three important features, namely:

1) *no single published textbook covers all areas of the curriculum. Therefore, teachers need to refer to a variety of sources, including published teaching materials from time to time. The majority of the materials are sourced from specific organizations and the Internet;*

2) *students need to create vocabulary for the topic. To do this, teachers are encouraged to use adaptive software such as “Sketch Engine”: <https://skell.sketchengine.co.uk/> . It is advisable for teachers to study/check vocabulary and look at useful examples in English from authentic texts. Teachers are encouraged to help students learn these words in easy and communicative ways;*

3) *published tests are no longer acceptable to students. We also need to introduce authentic assessment to match the authentic materials that teachers use and the real tasks they create*(Kholiyorov B 2021).

That is, in modern English language teaching, teachers should organize lessons based on authentic sources, not on the same type of educational literature.

In conclusion, it is worth noting that it is not appropriate to create special educational literature for the methodological support system we are recommending. For this system, materials should be formed from different sources based on special subject programs for each audience separately. Our educational literature, which we prepared as part of our research work, partially provided teachers with some forms of acceptable materials for the field. Therefore, it would be appropriate for every teacher who wants to work in non-philological higher education institutions to use this system in combination with the traditional system. This system may be somewhat more complex than the technologies reflected in traditional programs. However, we believe that it will play an important role in the development of the field in terms of effectiveness.

References

1. Richards, J. C. (1976). The role of vocabulary teaching. *TESOL Quarterly*, 10, 77–89.
2. Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
3. Sweet, H. (1899). *The practical study of languages*. Oxford University Press.
4. Sadam, M. (2022). Learning English as a foreign language through authentic materials. *International Journal of Advanced Academic Studies*, 4(1), 24–27.
5. Allanyazov, M. B. (2021). *Dictionary of English-Russian-Uzbek terms for architectural and construction specialties*. Tashkent.
6. Volkovskaya, D. I., Peremkulova, A., & Hakimov, M. Kh. (2005). *English-Russian-Uzbek dictionary of computer science*. Publishing House of the National University of Uzbekistan named after Mirzo Ulugbek.
7. Aripov, A. N., Mirzakhidov, Kh. M., Shermatov, Sh. Kh., Saidkhodjaev, S. R., Hasanov, P. F., Amirov, D. M., & Bakirov, O. A. (2004). *Explanatory dictionary of information and communication technologies*. UNDP Digital Development Initiative Programme.
8. Kosimova, A., & Kosimova, M. (2006). *English-Uzbek-Russian anatomical dictionary*. Mehridaryo Publishing House.
9. Uzoqov, G. N., Kholiyorov, B. H., & Tohirova, Sh. Y. (2025). *Energy lexis (Uzbek-English-Russian terminological dictionary)*. Ilm-fan-ma’naviyat Publishing House.
10. Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan, British Council Tashkent, & Representatives of universities in Uzbekistan. (2022). *Methodological recommendations (descriptors) for teaching subjects in English (EMI)*.
11. Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.

12. Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97–114). Oxford University Press.
13. Laufer, B., & Hulstijn, J. H. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning*, 51(3), 539–558.
14. Widdowson, H. G. (1978). *Teaching language as communication*. Oxford University Press.
15. Kholiyorov, B. H. (2021). *Developing lexical competence in teaching English in agricultural specializations* (Doctoral dissertation, Samarkand).