

ESSENTIALITY OF DEVELOPING TERMINOLOGICAL COMPETENCE OF STUDENTS MAJORING IN PETROLEUM ENGINEERING: GUBKIN'S EXPERIENCE

Karina B. Bazarova

ESP instructor, "Foreign Languages" Department

Bakhora A. Turaboeva

ESP instructor, "Foreign Languages" Department

Branch of Russian State University of Oil and Gas (National
Research University) named after I.M. Gubkin in Tashkent city

***Abstract.** This article examines the specific features of developing terminological competence in students of an oil and gas university, taking into account the distinctive characteristics of oil and gas terminology. The article analyzes the importance of mastering and appropriately using specialized terminology in the context of professional and intercultural communication. In conclusion, the author argues for the expediency of using interactive methods to enhance the effectiveness of student instruction.*

***Keywords:** terminological competence, petroleum engineering, oil and gas terminology, communication.*

Currently, due to the growing role and demand for foreign languages in many areas of modern human activity, non-linguistic universities, particularly technical universities, are striving to meet current societal requirements and realities. Recently, there has been an increasing demand for highly qualified engineers who possess English language skills and can apply them in practice specifically within the oil and gas

industry, which, being international in nature, demonstrates a trend of rapid development.

It is evident that specialists in the oil and gas industry must know English, as this sector encompasses not only the domestic but also the foreign economic segment. Furthermore, new information about scientific developments and research often appears in English for the general public. Consequently, there is a need for in-depth study of English and the development of communicative skills to maintain the competitiveness of enterprises and employees in the oil and gas sector.

It should be noted that today, in modern realities, there is an acute need for specialists with knowledge of English and its widespread application because, first and foremost, in the current conditions of digitalization, the operation, adjustment, repair, and overall maintenance of modern digital equipment are simply impossible without knowledge of technical English.

As part of this research, a survey was conducted among graduates of the Branch of Branch of Russian State University of Oil and Gas named after I.M. Gubkin in Tashkent regarding the necessity of using a foreign language (English) in their professional activities. The survey involved 57 graduates of the Branch from 2017–2022, specializing in “Geological Exploration Technology” and the academic program “Oil and Gas Engineering”. All respondents were asked to answer the question: *“For what purpose do you use English in your professional activities?”*

The survey results revealed that mastery of professional terminology enables oil and gas industry specialists to:

- read and understand in English instructions for the use of equipment and technologies, as well as design and engineering documentation, which is developed based on technical English (70% of respondents);
- study foreign experience in the use of modern oil and gas production technologies, learn about the capabilities of new equipment, and familiarize themselves with innovative developments and advanced scientific and technological achievements by reading specialized literature and professional journals in English (52% of respondents);
- have career advancement prospects, as in the oil and gas industry, in light of the use of the latest innovative developments in modern conditions of digitalization, there is a growing demand for highly qualified engineers who know English and can apply it in practice (50% of respondents);
- use geological software packages for building virtual 3D models of oil and gas fields with English-language interfaces, which are used by almost all oil and gas companies (18% of respondents);
- engage in professional communication with foreign experts and partners in English (12% of respondents).

It is evident that at the present stage, the goal of professionally oriented English language teaching for oil and gas students should be the formation not simply of communicative or terminological competence, but of foreign-language linguocultural competence in the petroleum engineer [1, p. 27].

Speaking of effective professional communication, it is necessary to note that knowledge of professional terminology plays a special role.

Teaching oil and gas terminology to students has a number of distinctive features. First, it often happens that a particular word in its

general meaning has one translation (e.g., *development* – *развитие*), whereas in oil and gas terminology it is mostly used in the meaning of "разработка" (e.g., *development of an oilfield* – *разработка нефтяного месторождения*). Furthermore, context plays a significant role, as in different contexts this term acquires different meanings:

- *advanced development* – перспективная разработка;
- *marginal development* – разбуривание месторождения от периферии к центру;
- *heat development* – тепловыделение, образование тепла;
- *delayed development* – замедленное разбуривание месторождения с одновременной эксплуатацией.

Another special group within the oil and gas terminological system consists of terms that have expressive nuances and represent scientific and technical phraseological units, also known as zoonyms. These present difficulties in professional foreign-language communication and, accordingly, lead to challenges in learning these terms [2, p. 88].

Among the most common zoonyms are the following terms: *wildcat* – поисково-разведочная скважина; *monkey board* – площадка для верхового рабочего; *pipe dog* – трубный ключ; *rabbit* – скребок для чистки трубопровода; *butterfly* – выпускной клапан; *doghouse* – вагончик-бытовка бурового мастера; *snake* – асбестовый шнур; приспособление для подачи конца каната на верх буровой вышки; *nodding donkey* – насос-качалка.

Progress does not stand still, and the development of scientific and technical ideas, as well as the emergence of technological approaches to oil production and the operation of oil and gas infrastructure, lead to the

continuous development and renewal of the oil and gas terminological base.

In the terminology of oil and gas production, borrowed terms are also common – for example, from mathematics, geology (*sweet oil* – сернистая нефть, *man-caused waters* – техногенные воды), chemistry (*boiling point* – точка кипения), as well as from other fields.

It is evident that oil and gas terminology has a number of features that introduce specific challenges into the process of its acquisition. Teaching terminological vocabulary at the Branch of Russian State University of Oil and Gas named after I.M. Gubkin in Tashkent takes place within the framework of instruction in all language aspects (pronunciation, specialized vocabulary, grammar) and all types of speech activity (speaking, reading, listening, and writing).

The teaching of terminological vocabulary to students is based on a communicative-cognitive approach, which assumes instruction based on specially selected professionally oriented authentic texts that have subject-specific focus and professional significance. During classes, students are engaged in active speech activity through a special set of exercises, including exercises aimed at developing both communicative skills and analytical thinking, teamwork abilities, as well as information search and processing skills. For effective mastery of relevant oil and gas terminology, the following methods are widely used in classes: project-based method, case-study, role-play, presentations, as well as the possibilities of applying artificial intelligence (AI) and information and communication technologies.

In conclusion, it should be noted that the effectiveness of teaching terminological vocabulary to students of an oil and gas university can

only be achieved through simultaneous instruction of English as a means of communication, under the indispensable condition of using Russian in the classroom as one of the means of explanation, a means of translation, and a means of assessment.

REFERENCES

1. Bagretsova, N.V. (2021). *Terminological Guide to the Oil and Gas Industry: Land – Sea: For English Language Learners in Oil and Gas Engineering Specialties*. Arkhangelsk, 236 p.
2. Miroshnichenko, E.A. (2020). English Zoonyms in Professional Speech of the Oil and Gas Industry. *Bulatov Readings. Collection of Articles*. Moscow. pp. 87-89.