



## CHALLENGES OF DEVELOPING PROFESSIONAL COMPETENCIES OF FUTURE SPECIALISTS IN OIL AND GAS (EVIDENCE FROM ESP TERMINOLOGY)

Assoc. prof. **Taktasheva Dinara Rinatovna**  
Branch of Russian State University of Oil and Gas  
named after I.M. Gubkin in Tashkent city  
ORCID: 0009-0007-5953-2588  
[taktasheva.dinara03041980@gmail.com](mailto:taktasheva.dinara03041980@gmail.com)

**Abstract.** This article is devoted to substantiating the significance of terminological competence in professional activity and communication, the need to master terminological competence as the most important indicator of professionalism and a factor in improving the professional communication quality. In addition, the article analyzes English professional vocabulary, in particular jargon associated with the use of animal names, provides examples of the most difficult to translate and perceive vocabulary, namely zoonyms used in the oil and gas industry. Moreover, the article contains a large number of examples from modern literary sources.

**Keywords:** term, terminology, professional competence, terminological competence, oil and gas industry, future specialist, zoonym.

## NEFT VA GAZ SANOATIDA BULAJAK MUTAXSISLARINING KASBIY KOMPETENSIYATLARINI RIVOJLANTIRISH MUAMMOLARI (INGLIZ TILINING MAXSUS TERMINOLOGIYASI MISOLIDA)

Dots. **Taktasheva Dinara Rinatovna**  
I.M.Gubkin nomidagi Rossiya davlat neft va gaz  
universitetining Toshkent shahridagi filiali

**Annotatsiya.** Ushbu maqola kasbiy faoliyat va aloqa sohasida terminologik kompetentsiyaning ahamiyatini, kasbiy mahoratning eng muhim ko'rsatkichi va neft va gaz sanoati mutaxassislarining kasbiy muloqot sifatini oshirish omili sifatida terminologik kompetentsiyani o'zlashtirish zarurligini asoslashga bag'ishlangan. Bundan tashqari, maqolada ingliz tilining professional terminologiyasi, xususan, hayvonlar nomlari, neft va gaz sanoatida qo'llaniladigan zoonimlar bilan bog'liq jargon so'zlari tahlil qilinadi. Maqolada zamonaviy adabiy manbalardan ko'plab misollar mavjud.

**Kalit so'zlar:** atama, terminologiya, kasbiy kompetensiya, terminologik kompetensiya, neft va gaz sohasi, bo'lajak mutaxassis, zoonim.

## ПРОБЛЕМЫ РАЗВИТИЯ ПРОФЕССИОНАЛЬНЫХ КОМПЕТЕНЦИЙ БУДУЩИХ СПЕЦИАЛИСТОВ НЕФТЕГАЗОВОЙ ОТРАСЛИ (НА ПРИМЕРЕ СПЕЦИАЛЬНОЙ ТЕРМИНОЛОГИИ АНГЛИЙСКОГО ЯЗЫКА)

*Доц. Такташева Динара Ринатовна  
Филиал Российского государственного университета  
нефти и газа имени И.М. Губкина в городе Ташкенте*

**Аннотация.** *Статья посвящена обоснованию значимости терминологической компетенции в профессиональной деятельности и общении, необходимости овладения терминологической компетенцией как важнейшим показателем профессионализма и фактором повышения качества профессиональной коммуникации специалистов нефтегазовой отрасли. Кроме того, в статье анализируется английская профессиональная лексика, в частности жаргонизмы, связанные с использованием названий животных, а именно зоонимы, используемые в нефтегазовой отрасли. Статья содержит большое количество примеров из современных литературных источников.*

**Ключевые слова:** *термин, терминология, профессиональная компетенция, терминологическая компетенция, нефтегазовая отрасль, будущий специалист, зооним.*

### **Introduction.**

Under new socio-economic conditions, the development of the education becomes one of the most essential issues in the Republic of Uzbekistan, since it facilitates the transition to the the formation of priorities for the development of the state. Highly educated youth constitute the main strategic reserve of socio-economic reforms in Uzbekistan. Currently it is impossible to imagine the further development of the society without the youth.

In modern realities, specialists who are proficient in information technology and who are proficient in foreign languages are in great demand.

Within this framework mastering a professional language constitutes one of the high-priority objectives of current professional education. This is due to the fact that terminology performs several functions at different stages of the formation of a specialist:

- at the stage of professional education it acts as a source of knowledge and a tool for mastering professional experience, during the period of professional activity;
- as a means of professional communication and a theoretical basis for the professional growth of a specialist through its replenishment and updating.

Therefore, the terminological competence of the relevant field of knowledge is traditionally an indicator of the quality of assimilation of educational material within the educational process, and its active use in communication among professionals contributes to mutual understanding and cooperation in the experience exchange.

Taking into account the fact that in addition to the state language, Russian and English are widely used at oil and gas industry enterprises, as well as the presence of representative offices of foreign companies and joint ventures in our republic, determines the relevance of knowledge of English by specialists in the oil and gas industry.

Knowledge of English for specific purposes (oil and gas terminology) allows future graduates to:

- read and understand in English instructions for the use of equipment and technologies and design documentation, which is developed in reliance upon technical English;
- use geological software packages for building virtual 3D models of oil and gas fields with an interface in English, used by almost all oil and gas companies;
- study foreign experience in the use of the advanced oil and gas production technologies, know the capabilities of new equipment, get acquainted with innovation-based developments

and advanced achievements of science and technology by reading specialized literature, professional journals in English;

- carry out professional communication with foreign experts and partners in English;
- have the prospect of career development, since in the oil and gas industry, in light of the use of the latest innovation-based developments in modern conditions of digitalization, the demand for highly qualified engineers who speak English and can apply it in practice is increasing.

### Literature review.

Considering the issue of determining the essence and structure of a specialist's terminological competence is justified by a number of objective reasons. The first reason is associated with the intensive development of art, science and technology and emergence of new terms that enable to fix in the language the results of intellectual and creative human activity. As Churilova (2015) notes, the terminological "explosion" resulted in a terminological "barrier" that manifested itself at the beginning of the XXI century and "which became the basic obstacle in solving many problems that arose as a result of the lack of a common understanding and interpretation of terms that function in different spheres of life of both individual peoples and entire countries" (Churilova, 2015).

Eliminating this terminological barrier represents paramount importance in intercultural and professional communication. The second reason is associated with a change in the paradigm of the current education. The transition from a knowledge-based to a competency-based model of education has radically changed the attitude to the significance of terminology in the process of assimilating educational information, and primarily in the disciplines of the humanitarian subject areas. The emphasis is gradually shifting from the elementary reproduction of stable definitions and their most accurate application in educational situations to understanding the terminological diversity of modern humanitarian knowledge. In this regard, there is an increased need not only for differentiation, but also for clarifying the meanings of the terminology used in intellectual, creative, communicative and other types of activity. In this regard, there are being actively carried out terminological studies, which are related to identifying and describing the functions of a term in professional texts of different genres and in various situations of professional communication, defining the features of using terms in speech and computer systems, practical issues of terminography in the design and development of the professional vocabulary (Drujilov, 2015).

Professional communication traditionally implies communication within the professional sphere between representatives of certain professions (as well as between representatives of related professions). In recent years, in many countries researches are being carried out on the issues of terminological education of specialists, since scientists and practitioners admit, that terminology, as one of the main features of the scientific style, the informative core of the vocabulary of the language of science and profession, should be reflected at all stages of preparation for professional activities and communication. After all, the sphere of professional activity is served by a special language - the language of professional communication. In the opinion of Butylov (2014), terminology should formulate the core of the language of professional communication, since it concentrates in itself its main features and properties (Butylov, 2014).

That is, scientists pay attention to the importance of knowledge of terminology in the formation of the linguistic and professional competence of a contemporary specialist. The description of the functional map of a specific type of professional activity requires the use of special terminology that determines the nature and scope of professional competencies. Currently many studies prove that mastering professional (core subject) competence in a university environment is more successful if this process proceeds in a purposeful, structured manner and in parallel with the study of terminology (V.A. Bukhbinder, T.V. Vasilieva, N.P.

Vetlov, E. Yu. Dolmatovskaya, R.K. Minyar-Beloruhev, R.G. Piotrovsky, I.V. Rakhmanov and others). This is justified by the fact that the secrets of any profession underlie the terminology of a specific specialty. It is terminological literacy, contributing to the acquisition of scientific knowledge and practical skills, that makes a specialist more competitive (Yermolaeva, 2016). Another essential reason is the maintenance of communication in the professional community. Knowledge and accurate use of special terms in the course of direct or indirect communication of professionals ensures the quality of understanding of information, promotes professional consolidation and expands the possibilities for professional experience exchange. From the point of view of Nesterskaya, "It is the terminology that provides informational understanding of the subjects of the academic sphere: students and teachers, and then the subjects of the professional sphere of communication: managers and subordinates, colleagues, partners, competitors" (Nesterskaya, 2023). The role of the professional community in enhancing the importance of terminological competence is also ensured by involving its representatives in the expert assessment of the professional education quality. Understanding the specifics of "terminological competence" is impossible without referring to the definition of the "competence" term, which constitutes one of the basic categories in the competence approach.

### Research methodology.

Based on the goals and objectives of this research article, as well as taking into consideration that this research is theoretical in nature, in the process of investigation such research methods as observation, comparison, analysis, synthesis, and the method of generating ideas have been widely applied.

### Analysis and Discussion of Results.

Under modern conditions it has become obvious that the level of proficiency in a foreign language that ensures effective social intercultural communication, including in professional activities, is impossible without a good knowledge of industry terminology. The multifaceted nature of the oil and gas complex terminology system reflects rapid development of the industry and is characterized by the emergence of a large number of new terms. Often, professional jargon, actively functioning in professional speech activity, becomes a source of terms and vice versa: academic terms become jargon, acquiring new imagery and new life. For example: the slang words "*fish*", "*fishing*" have gone from a slang word to an academic term.

The persistent dependence of the standard of living and development of humanity on hydrocarbon production forces oil companies to interact in the international oil market: to import and export equipment and technologies that require certificates and operating instructions. Translation of oil and gas industry documentation is a complex process, since it must be translated accurately, without distorting the meaning, since even the slightest error can lead to serious losses or injuries to personnel. This documentation includes such areas as exploration, development and operation of oil and gas fields; drilling of oil and gas wells; operation and maintenance of oil production facilities; operation and maintenance of oil, gas and refined products transportation and storage facilities; operation of oil and gas equipment; contracts and accompanying documentation for all production processes.

Particular difficulties in professional foreign language communication are presented by trope terms, turns of speech, in which words or whole phrases are used in a figurative sense. That is why the object of our study was the terms and terminological combinations of the English language of the oil and gas terminology system, containing the names of animals. In this paper, we use the term: **zoonym** as a general vocabulary unit, which, on the one hand, represents a zooseme, the actual name of an animal, and on the other, can act as a zoomorphism, its figurative, metaphorical version. It is the metaphorical transfer of meaning that becomes the basis for the development of pragmatic meanings in oil and gas industry terms with zoocomponents. Associative ideas about the character, habits of animals, their external

similarity to an object or process are decisive in the choice of a zoonym in the emergence and functioning of a zooterm.

A large number of zoonyms used in the professional language of English-speaking oil workers creates certain difficulties for Russian-speaking representatives of this industry, this is due to the intercultural differences of two different nations.

The emergence of an impressive number of zoonyms in the vocabulary of the oil industry was rather influenced by the conditions in which the industry was formed: the first wells in America were drilled in the 60s of the XX century by representatives of various strata of the population, who called the tools and production processes using simple, everyday language, making up for the lack of their vocabulary by using commonly used words in a figurative sense. In English “oil and gas” slang, zoonym terms denote key elements of wells and important aspects of its operation. Some components of the drilling rig and associated objects have animalistic nominations.

The derrickman performing his duties on a special platform at the top of the drilling rig (derrick) is called a **“monkey”**. Accordingly, the platform itself is called a **“monkey board”**.

*“Where is the monkey? He’s on the monkey board”.*

In the professional slang of Russian oil workers, “martyshka” means a special metal tool for quickly and efficiently tightening pipeline valves. Thus, a literal translation can mislead one of the parties to intercultural communication.

In multilateral drilling, the term **“rathole”** is used to denote a well’s lateral. **“Kelly rathole”** is a corresponding translation of the trench for the leading pipe.

**“Big Bear”** is a shift that lasts more than 50 days, **“elephant”** is a giant oil field, **“nodding donkey”** is a pump-pumping unit. A well with difficult operating conditions is called a **“bear cat”** in foreign oil slang. A **“cat”** is also a tracked all-terrain tractor designed to prepare a site for a drilling rig. A **“wild cat”** is an exploratory well that is drilled to discover new oil and gas horizons in an area that is not an explored oil field. **“Cathead”** is a pin reel, **“catwalk”** is a walkway.

Well operation is always associated with a large number of complicating factors, one of which is the formation of asphalt-resin-paraffin deposits on the walls of wells and other oil and gas production equipment, which significantly impair hydrocarbon production. Various methods are used to combat them, one of which is the mechanical removal of deposits from the walls of pump-compressor pipes and pipelines using a tool called **“pig”** by foreign oilmen; in Russian it is called **“scraper”** or **“chushka”**. The verb **“pig”** means “to drag a scraper through pipes to clean them”.

**“We have pigs today. Get the guys to have the pig launcher ready”** - this refers to the scraper and the pig launch chamber.

There are several versions explaining the name of the pig scraper:

1) **pigskin** was used to make the first scrapers, it was filled with various materials and launched into water pipes to clean them.

2) for some time, the scraper was a log and had metal pads, firstly, to ensure high-quality cleaning of the pipe and secondly, to prevent it from abrading against the walls of the pipeline. The metal pads of the scraper, moving inside the pipe, scratched the pipe from the inside and **“squealed like pigs”**.

3) For this device, you can find the name - a device for gaging pipelines (pipeline inspection gauge). It is logical to assume that **“pig”** is an abbreviation.

**Never let a worm bring the pipeline pig.** (Never send a newbie for a scraper). “Worm” is an unskilled worker, a young specialist. In Russian-speaking companies, the word “young” is used in this sense. Recruits in the American army are also called “worms”. During the operation of a well, there are “losses” of tools in the mine workings. As a result, there is a need to perform **“fishing jobs”**. The “lost” tool itself is called a **“fish”**. Almost all tools for performing such work are zoonyms. **“Spider”** is a special fishing tool that has become a slang of domestic oil workers

in literal translation - spider, "casing dog" is a pipe snare for casing pipes, "**lifting dog**" is a gripping tool for lifting rods that transmit movement from the pumping machine to the pump, "**latch dog**" is a gripping tool with a latch.

The most frequent zoonym among English-speaking oil workers is the word "**dog**". The popularity of the dog is easy to explain, it is devoted to humans and lives with workers at the fields. What resembled parts of the dog's body, its habits, became zonyms: **dog house** (dwelling), **dog leg severity** (the intensity of the curvature of the barrel), **dog nut** (faceplate), **dog leg** (a sharp curvature of the wellbore), **hand dog** (a key for screwing together drill rods), **lockdown dog** (lock latches). In Russian, in the speech of oil workers, on the contrary, there is no mention of "dogs", accordingly, a translation by calque will not positively serve the purpose of intercultural communication.

Sooner or later, the translator faces the question of the correctness and adequacy of the translation of zonyms. Direct translation and calque will not solve this problem. Attempts to guess the imagery, due to some features of the mentality and historical prerequisites for the emergence of certain zonyms, will also not lead to the desired result.

When translating jargon that carries an animalistic connotation, it is advisable to analyze the historical reasons for mentioning animals. In the verbal translation of zonyms, if the exact equivalent term is unknown, a descriptive translation should be used, it is advisable to find images of the described objects or processes using search engines.

Difficulties may also arise in situations where the technologies and tools used abroad are not available in our country and vice versa. In such situations, it is also necessary to resort to a descriptive translation, using some analogies in the target language.

It is possible that the original purpose of professional zoo-slang was to introduce a playful component into the hard everyday work of drilling rig workers. Zonyms express ethnocultural features of understanding the surrounding world more clearly than any other vocabulary, since images of animals in one culture in some cases can be endowed with properties that for representatives of another culture may seem logically unfounded or even contradict the established stereotypes of perception of these animals. In the process of working with foreign colleagues, these problems are gradually resolved through mutual communication. Translation of oil and gas vocabulary can only be carried out on the basis of an integrated approach, availability of relevant knowledge and the ability to use associations in translation.

### Conclusion.

In reliance upon the research results it can be concluded, that terminological competence of the student majoring in oil and gas has the following characteristics:

1. Diversity of demonstration. This type of competence is implemented in two aspects: an integral characteristic of a person, which is developed in the process of mastering and applying the conceptual and terminological apparatus of a particular science and (or) the sphere of human activity and a situational characteristic of a person, manifested in the system of working with terms within the boundaries of a certain conceptual and terminological field.

2. Integrativeness. The integrative nature of terminological competence is demonstrated in the fact that it, in one way or another, is present as a component in other competencies. Understanding and adequate use of special vocabulary ensures their implementation in professional, communicative, creative, social and other types of activities of a contemporary person.

3. Connection with the terminological potential of the individual. According to Yermolaeva, terminological competence is the result of the development of the terminological potential of an individual, which manifests itself "in the steady desire of a specialist to contribute to improving the functioning of the conceptual and terminological apparatus of the subject area of the discipline, guided by social interest" (Yermolaeva, 2014).

4. High dependence on education. Terminological competence is developed in two ways - through training and self-education. In the first case, the formation of terminological competence can act as a specially set goal that depends/does not depend on the needs and cognitive interest of students. Herewith knowledge of terminology acts as the basis for mastering specific subject educational material. In the second case, the formation of terminological competence is determined by the motives and cognitive interests of the person himself.

However, it should be noted that the terminological competence of oil and gas university students is of great importance in the formation of their professional skills.

### Reference:

Butylov N.V. (2014). *The role of special terminology in development of professional competence of linguiststranslators. Multiauthored monograph. Edited by O.A. Dronova. Tambov, TROO Biznes-Nauka-Obshchestvo Publishers, 2014, pp. 309–314.*

Churilova I.N. (2015). *Professional terminology as the means of professional communication in training of specialists in performing arts. [Scientific Bulletin of Siberia], 2015, Special issue (15), pp. 223–229.*

Drujilov S.A. (2015). *Professional competence and professionalism of a pedagogue: psychological approach. Siberia. Philosophy. Education, 2005, № 8, pp. 26–44.*

Khutorskoy A.V. (2016). *Defining general subject content and key competencies as characteristics of a new approach to designing educational standards. Online magazine Edios. 2002. Available at: <http://www.eidos.ru/journal/2002/0423.htm> (accessed: 20.09.2024).*

Miroshnichenko Ye.A. (2020) *English Zoonims in Professional Oil and Gas Industry Speech, Kuban state technological university, 2020, p. 88.*

Yermolaeva J.E. (2014). *Development of topical and terminological training vocabulary on the subject of ecology for trainees/ students and course attendees (based on materials of the State Fire Department Academy of the Ministry of Emergency Situations of the Russian Federation. Proceedings of the 16th International Research-Practice Conference "Theoretical and Methodological Problems of Modern Education". Moscow, Spetskniga Publishing house, 2014, pp. 106–113.*