

THEORETICAL FOUNDATIONS OF DEVELOPING TERMINOLOGICAL COMPETENCE OF FUTURE SPECIALISTS

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Abstract. *This article is devoted to substantiating the significance of terminological competence in professional activity and communication, the need to improve terminological competence as the most essential indicator of professionalism and a factor in enhancing the professional communication quality. In addition, the article presents developed structural and functional model of a specialist’s terminological competence as a theoretical basis for studying, as well as demonstrates the indicators of the performance of its components.*

Keywords: *term, terminology, terminological competence, model of terminological competence of a specialist.*

Introduction. One of the objectives of current vocational education is mastering a professional language. Terminology performs several functions at different stages of the development of a specialist - at the stage of professional training it acts as a source of knowledge and a tool for mastering professional experience, during the period of professional activity - as a means for professional communication and a theoretical basis for the professional growth of a specialist through its replenishment and updating. Therefore, confident knowledge of the terminology of the relevant field of knowledge traditionally serves as an indicator of the quality of learning material within the educational process, and its active use in communication among professionals promotes mutual understanding and cooperation in the exchange of experience. The modern pedagogical community recognizes the need for terminological literacy for professional activities. This is confirmed by the actualization of the problem of the formation and development of terminological competence at different stages of professional development.

The issue of the professional development becomes crucially important for the current youth. From the first days of our country’s independence, the education of a harmoniously developed generation, the formation of comprehensively developed youth, a spiritually rich personality has become one of the priority directions of the state policy of Uzbekistan. In this regard, a number of decrees and resolutions constituting an appropriate legal framework have been adopted and are constantly being improved to this day. All adopted laws and statutory acts reflect one idea, which, according to the President of our country, is to ensure the rights, freedoms and legitimate interests of young people, protect their lives and health, promote the spiritual, intellectual, physical and moral development of young people, ensure for young people accessible and high-quality education, creating conditions for their employment, as well as educating young people in the spirit of patriotism, citizenship, tolerance, respect for laws, national and universal values. Thanks to the attention and care of President Sh.M. Mirziyoyev, modern young people of Uzbekistan are showing themselves as real creators, important participants and creators of the

economic, political, social, and cultural life of Uzbekistan, and the coming 2024 was declared by the President as “The Year of Support for Youth and Business”, thereby indicating the country’s desire to strengthen the role of youth in the socio-economic development of the state.

Thus, the issues of the professional development of future specialist become crucially important thus 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.

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 I.N. Churilova 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, 2005). 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 done 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 N.V. Butylov, 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 L.A. 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, 2003).

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

Analysis and Discussion. As the analysis of scientific and pedagogical literary sources has shown, there is no consensus in the disclosure of the volume and content of the term "competence". Table 1, provided below, presents an analysis of the concept of "terminological" (conceptual) competence in contemporary literary sources:

Based on the considerations specified above, we will consider "competence", as a situational-activity category in terms of a generic concept in relation to all its types. From this point of view, competence is not just a set of knowledge, abilities, skills and personal qualities, but the ability to use them in a specific situation.

The need to highlight terminological competence as an independent type is primarily justified by the search for a basis that would enable combining theoretical and practical components of professional activity. Taking into consideration the fact that terminological competence is most significant in professional activity, we will consider it as a component of a broader type of competence - professional. Knowledge of terms, terminological compliances and

the ability to use them in speech is the most important component of the professional readiness of a contemporary specialist. Thus, under the terminological competence of a specialist we mean the ability and willingness to competently apply terminology in solving professional problems and in the process of professional communication.

Table 1

Comparative analysis of the concept of “Terminological competence” in contemporary literature¹

Definitions of “terminological competence” concept	Authors
A special type of organization of subject-area specific knowledge that enables to make efficient decisions in the relevant field of activity	S.A. Ilinykh
An independent type of competence, since constitutes an integral part of the terminological potential of an individual	N.V.Abramchenko, T.A. Artyushkina, E.G. Skibitsky, J.E. Yermolaeva and others
The structural component of information competence, since knowledge of terminology is the most important condition for improving the communication quality	O.G. Griban, O.M. Tolstykh and others
The structural component of professional competence, since the development of professional terminology is a prerequisite for obtaining professionally significant knowledge, skills and abilities	S.Kh. Vyshegurov, L.B. Tkacheva and others
Newly formed structure of the subject of activity, which represents a systemic manifestation of knowledge, skills, abilities and personal qualities, enabling to solve functional assignments that constitute the essence of professional activity	V.D. Shadrikov
A person’s ability to mobilize acquired knowledge and experience in a specific situation	L.Yu. Stepashkina

There is no consensus among domestic researchers on the issue of the structural organization of competence in general and its types in particular. Therefore, with the existing variety of approaches for understanding the essence of terminological competence, it is significant to perceive and study competence as a polystructural phenomenon. The following provisions have been accepted as the theoretical foundations for constructing a structural-functional model of terminological competence. A term is the main lexical means that fixes a concept in oral and written speech, a word (or phrase) of a specific subject area, which is the name of a concept and requires a definition. It belongs to the logical-conceptual system of a certain branch of scientific knowledge and the lexical system of the general literary language. With the help of terms in a verbal form, the results of the process of cognition of the essence of objects and phenomena of objective reality and the inner life of a person are recorded, as well as the discovery of new scientific knowledge is carried out. They simultaneously reflect the current level of development of the theory and practice of the relevant industry and constitute the basis for their further development. Such specific functions of the term as heuristic (the discovery of new scientific

¹Developed by the author based on the analysis of relevant literary sources

knowledge) and cognitive (the result of the process of cognizing the essence of objects and phenomena of objective reality and the inner life of a person, verbalization of a special concept) are implemented in this area (Leychik, 2007). Within the framework of the cognitive-activity approach, terminology is considered as the result of the cognitive activity of specialists, which consists in the conceptualization and verbalization of professional knowledge. As a result, there are developed the structures of knowledge, which receive their representation in the form of terms. In the paradigm of cognitive terminology studies, the term is considered as one of the ways of verbal representation of special knowledge, representing an information and cognitive structure that accumulates special knowledge required in the process of scientific and professional communication, as well as in professional and scientific activities.

However, the thesaurus description of terminology refers to the methods of representing the subject's knowledge about any subject area. In a thesaurus description, knowledge is fragmented and structured in such a way that it is divided into separate groups of concepts linked by certain relationships (Filippovich, 2002). This process relies on a subject-area ontology, which is viewed as a vocabulary of terms specific to a given domain, together with a set of axioms that ensure the interpretation and correct use of these terms. Ontological representation of knowledge is used for semantic integration of information resources, adequate interpretation of the content of text documents and search queries presented in a professional language. In this regard, we believe that a contemporary specialist will freely navigate in the logical-conceptual system of a certain branch of scientific knowledge and the lexical system of the professional language and is ready to develop an individual terminological dictionary as an information basis for understanding the requirements of the corresponding field of professional activity, if he has mobile knowledge in the form of specific terminology. Such a quality as the mobility of knowledge implies the ability to constantly update it and master new terminology (Choshanov, 1996). The psychological basis for the systematization of scientific and practical information about the field of professional activity in the form of concepts that reflect the most important, essential, natural signs of its main objects, phenomena or processes is the conceptual thinking of a specialist. Thus, when developing a structural and functional model of a specialist's terminological competence, as the first component, we consider an informational one, which function is to master the conceptual and terminological apparatus of the subject area of the profession and to develop an individual active professional terminological dictionary, which volume determines the quality of the subject's orientation in theoretical and applied aspects of mastering the subject area of the profession. We admit differences both in the content and volume of an active vocational vocabulary developed by a specialist at the stage of professional training and self-education, in the course of independent professional activity and during the period of professional development, as well as in the accuracy and completeness of the correct definitions of the corresponding concepts.

A person has the ability to differentiate terms according to areas of knowledge and practice, their definitions are disclosed on the basis of daily experience, communication with other people, information obtained from the media. The level of an active thesaurus assumes knowledge of terminology, which enables to adequately perceive and transmit professionally significant information in written and oral form during communication, to build logical conceptual schemes when solving theoretical and practical problems within the framework of professional duties. The term creation level is fixed in the form of a desire to improve the conceptual and terminological apparatus: its systematization, updating existing definitions, justifying the need to introduce new

terms into practice, etc. It should be noted, that this level is typical for subjects focused on scientific creativity and generalization of professional experience. Terminology is not only a tool for mastering professionally significant knowledge, skills and abilities, not only a means of communication, but also a means of comprehending and improving professional experience. Possession of special vocabulary can be one of the significant indicators of professionalism as the highest level of professional development of a person. Therefore, the objective of developing terminological competence is not just to know the subject more and better, but to include the acquired knowledge in the “terminological practice” of life (Yermolaeva, 2014). Therefore, as the second structural component of developing terminological competence, we consider the experience of operating professional terminology in professional communication by means of oral and written language. S.Kh. Vyshegurov draws attention to this fact stating that: “terms constitute the basis of professional communication, and neither reading nor speaking on professional topics is possible without mastering them” (Vyshegurov. 2012). Our selection of a practical component in working out the model for the terminological competence development is also justified by the fact that currently linguistics involves the study of language in connection with a person, his consciousness, thinking and activity. In terms of the anthropocentric direction of pedagogical research and linguistics, the study and development of linguistic signs (terms) of specialists is implemented by means of speech-thinking activity. Since the speech activity itself, as a rule, is included in any special (professional, scientific) activity, and the linguistic sign develops in a certain professional sphere (from the stage of its formation to the current state), in so far as the priority in researching the problem of mastering and using terms by specialists belongs to subject-activity approach. This means that for the development of terminological competence, lexical-terminological and professional-language practice is essential at the stage of study at a university and during the period of independent professional activity and professional communication.

The practical component of terminological competence, in general terms, is the experience of using terms in professional communication. Hence, its core function is communicative and linguistic. However, taking into account the functions implemented by the term in the language of science, it is necessary to specify somewhat the features of the use of scientific terms in professional activities. According to V.M. Leychik, the term, like any lexical unit, performs nominative, communicative and pragmatic functions. The nominative function is implemented in the form of the name of general concepts, categories, concept signs, operations in various special areas of human knowledge and activity. The communicative function is manifested in the form of using the term as a means of conveying special knowledge in space and time. The pragmatic function is considered as the connection of the linguistic sign with the participants in communication, specific conditions and the sphere of communication, which depends on the attitude chosen by the language producer when influencing the recipient (Leychik, 2007). The implementation of the nominative function of a term in professional activity is primarily associated with the accuracy of the use of the corresponding term in the course of its planning and implementation, in assessing its results, in the analysis of typical and atypical situations. The quality of implementing this function is determined by the efficiency, first of all, of theoretical professional education. For domestic higher education, the process of mastering theoretical educational material is traditionally based on compulsory acquaintance with special vocabulary, as well as the effectiveness of the educational process is determined by the accuracy of reproducing

the definitions of the terms studied. In the future, when performing professional activities, a specialist is required to have the following skills and abilities:

- orientation and reliance on the definitions of terms that perform categorical functions in a specific subject area of professional activity;

- recognition and understanding of the meaning of terms in professional speech and professional text, including in a foreign language;

- establishment of conceptual and terminological links, classifications of terms in order to systematize professionally significant information;

- possession of the basics of terminological analysis to determine the essence of phenomena by clarifying the definitions of the terms denoting them;

- determining the meaning of the term based on the information context.

The listed skills contribute to the comprehension of professional experience, are necessary in identifying problems related to the performance of professional duties, and searching the ways to resolve them, in the preparation of analytical reports, statements, implementation of research projects, etc.

The communicative function of terms is fully implemented in the process of professional communication. The use of special vocabulary ensures the success of the transfer of professionally significant information, promotes unification of people in a professional community, transfer of knowledge, skills and methods of activity within the professional community, exchange of professional experience, implementation of the function of social control in order to regulate the behavior and activities of employees, etc. Furthermore, the pragmatic function of the term is implemented in professional communication, but, unlike the communicative function, it contributes to the self-expression of the individual, determines efficiency of self-presentation, improves or worsens mutual understanding in joint professional activities. To implement the functions, listed above, a specialist requires the following skills and abilities:

- choose terms appropriately and generate correct terminologically rich speech;

- correctly understand, convey professional texts and speech of specialists;

- adequately use special vocabulary in his/her own statements when formulating thoughts in the process of verbal communication, as well as in the main types of presentation of ideas, opinions, positions, experience;

- narration, description, reasoning and design;

- professionally interpret the speech of colleagues, including foreign ones;

- explain using simplified or complicated definitions, without changing the content, thus making knowledge available to any companion;

- accurately and freely use terms in the field of scientific, professional and everyday communication. In the process of developing terminological competence, it is necessary to take into consideration the characteristics of subjects of professional activity;

- a high degree of their differentiation by the knowledge level of the professional language, availability of professional specialization, motivation to improve the professional language, development of intellectual, cognitive, psychoemotional and linguistic abilities, since terminological competence implies consideration of lexical units (word, word formation).

The need to single out the reflexive-linguistic component of terminological competence as an independent structural unit is proven by the fact that this component is compulsory for professional competence, and, accordingly, is important for terminological competence. In the

opinion of S.A. Drujilov, the reflexive component “is manifested in the ability to consciously control the results of one’s activity and the level of one’s own development, personal achievements; the formation of such qualities and properties as creativity, initiative, focus on cooperation, co-creation, a tendency to self-analysis” (Drujilov, 2005). The reflexive component enables to regulate the process of manifestation of competence and evaluate its results. It is a regulator of achievements in the professional language, search for personal meanings in the use of terminology in professional communication, as well as a stimulus for self-knowledge, professional growth, improvement of skills and formation of an individual style of work with terminology. This structural element demonstrates itself in the form of an assessment of achievements in the development and application of terminology and desire of a specialist to improve the accuracy and quality of the use of terminology in professional activity and communication in terms of such indicators as:

understanding importance of accuracy and correctness of the use of special vocabulary in the process of transferring professionally significant information;

awareness of the terminology role in understanding and recording personal professional experience;

awareness of the scope of an active professional thesaurus (definitions of which terms are familiar or can be clearly formulated);

presence of difficulties in understanding professional information containing special vocabulary;

the need for self-education, including through the expansion of personal professional thesaurus.

Thus, the specifics of a specialist’s terminological competence is most fully reflected by its structural and functional model through a set of functionally related components that reveal internal organization of terminological competence and have a functional purpose, which essence of is presented in Table 2:

Table 2

Functional components of terminological competence and their functional use²

Functional components	Functional use
Informational	a special type of organization of subject-related knowledge in the form of special terminology, enabling to justify the choice and explain the logic of their actions in the relevant area of professional activity
Practical	experience of using terms in professional communication by means of oral and written speech
Reflexive	practical experience of using terminology in typical and non-standard professional situations, including the search for new terms and their application, as well as the specialist’s attitude to terms and the process of dealing with them

Conclusion. In reliance upon the research results, it is possible to make a conclusion that all the components of the structural and functional model of terminological competence constitute an

²Developed by the author based on the carried-out research

integral system, therefore they are interconnected, complement and interdependent each other due to their functional purpose (indicative, communicative, creative).

In addition, in reliance upon the research results it can be concluded, that terminological competence 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. The developed model of terminological competence of a specialist constitutes a theoretical basis for the subsequent development of a methodology for studying it among teachers in the field of didactics.

REFERENCES

1. Anarkulova G.M. (2015). Model for training teachers of vocational education based on a systematic approach. Scientific journal “Young scientist”. № 13 (93). July, 2015. pp. 93-96.
2. Butylov N. V. (2014). The role of special terminology in development of professional competence of linguists translators. Multiauthored monograph. Edited by O. A. Dronova. Tambov, TROO Biznes-Nauka-Obshchestvo Publishers, 2014, pp. 309–314.
3. 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.
4. Drujilov S. A. (2005). Professional competence and professionalism of a pedagogue: psychological approach. Siberia. Philosophy. Education, 2005, № 8, pp. 26–44.
5. Yermolaeva J. E., Gerasimova I. N. (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.
6. Yermolaeva J. E. (2014). Fostering of terminological culture in cadets and students of the State Fire Department Academy of the Ministry of Emergency Situations of the Russian Federation within “Fire Safety” training course. Historical and socio-educational notion, 2014, vol. 6, part 2, pp. 85–88.
 7. Filippovich Iu. N., Prokhorov A. V. (2002). Semantics of information technology: Experiments with thesaurus and dictionary definitions. Moscow, MGUP Publishing house, 2002, 368 p.
 8. Gribov O. N. (2012). Subject-matter and structure of informational competence of students of a pedagogical higher education institutions. Conceptual framework of pedagogy and education: collection of studies. Edited by Ye. V. Tkachenko, M. A. Galaguzova. Yekaterinburg, SV96, 2012, issue 7, pp. 336–344.
 9. Ilinykh S. A., Altukhova T. A. (2014). Methodical study of professional competencies of representatives of government authorities: the aspect of communication. Theory and practice of social development, 2014, 1, pp. 78–81.
 10. 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: 20.06.2020).
 11. Khutorskoy A. V. (2003). Key competencies as a component of person-oriented education. Public Education, 2003, № 2, pp. 58–64.
 12. Leychik V. M. (2007). Terminology studies: subject, methods, structure. Moscow, LKI Publishing house, 2007. p. 256.
 13. Nesterskaya L. A., Noreiko L. N. (2003). Functional domains of financial lexicon (from professional language to media language). Proceedings of the Xth International Congress of International Association of Teachers of Russian Language and Literature “Russian Word in the World Culture”. June 30 - July 5, 2003. Plenary sessions: collection of reports. In two volumes. Vol. I. St. Petersburg, 2003, pp. 164–168.
 14. Sharipov Sh. S. (2017). Personality model of modern teacher. Eastern European Scientific Journal - Germany, 2017. Ausgabe 3-2017, ISSN 2199-7977 DOI 10. pp. 93–96
 15. Titova E. V. (2016). Terminology analysis as method and target of research. The Emissia. Offline Letters: Online Science Magazine. June 2010, ART 1425. Available at: <http://www.emissia.org/offline/2010/1425.htm> (accessed: 22.03.2020).
 16. Vyshegurov S. Kh. (2012). Terminological competence as requirement of professional education. Professional education in today’s world, 2012, №4 (7), pp. 89–97.