

## CONCEPTUAL BASIS OF PROFESSIONALLY ORIENTED FOREIGN LANGUAGE TRAINING OF FUTURE SPECIALISTS IN APPLIED MECHANICS

**Alla Feschuk**

*National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, Ukraine  
fam2012@ukr.net*

The article deals with the problem of definition of the notion of "professionally oriented foreign language training of future specialists in applied mechanics", particularly, it reveals the differentiation of the notions of "foreign language training", "foreign language education" and "teaching foreign languages", determines the purpose and the content of foreign language education and teaching foreign languages and the peculiarities of foreign language education of future specialists in applied mechanics. Integration into European educational space caused the changes in the Ukrainian educational market including professional training of future specialists in applied mechanics who should be able to adapt to multicultural, multilingual environment for the realization of personal and professional needs. The concept of professionally oriented foreign language training is analyzed and defined by scientists as a process of teaching foreign languages oriented to the formation of foreign language professional competence for solving professional tasks in their sphere. The key factors of professionally oriented foreign language training of future specialists in applied mechanics (cognitive and informational, linguistic, professional, psycholinguistic, content and structural) are introduced in the paper. The leading role of foreign language education consists in effective communication, cultural awareness, ability to work and adapt to multilingual and multicultural teams and high level of communication competence, which are considered as the key requirements of the recruitment strategies of employers.

**Keywords:** foreign language training; foreign language education; teaching foreign languages; professionally oriented foreign language training; future specialists in applied mechanics; professional linguodidactics.

**Introduction.** Social, economic, political and cultural changes put forward new requirements for higher education and professional training of future specialists in applied mechanics in our country during the last few decades.

Integration of Ukraine into European educational space, fundamental changes in the global labor market require the changes to be made in the educational market, particularly professional training of future specialists in applied mechanics, able to adapt to multicultural, multilingual environment for the realization of personal and professional needs.

The necessity of intercultural cooperation makes modern specialists of applied mechanics communicate with specialists of other cultures, adapt to the foreign language surrounding. Therefore, the investigation of the process of foreign language training of future specialists in applied mechanics is an important issue for their professional training that serves as a significant factor of Ukraine's integration into the world economic community.

In the last decade, there has been a growing interest in the foreign language training. The problem of foreign language teaching of the specialists in various fields was the subject of research of many scholars: programmers (Y. Bulakhova, R. Hryshkova), future lawyers (D. Demchenko, O. Nitenko, L. Pavlenko), specialists in natural sciences (N. Maksymenko), students of technical specialties (I. Sekret, K. Yelisieieva), specialists in information and communication technologies (N. Sura), specialists in economy (O. Khomenko), students of technical universities in Poland (N. Sheverun), specialists of non-linguistic faculties (O. Ivanova), students of agricultural specialties (A. Kuznietsov).

The problems of foreign language training raise a great interest in the European educational space: the definition of the notion "vocationally oriented language learning" (J. Trim, G. Egloff, A. Fitzpatrick), peculiarities of vocationally oriented language learning organization (R. Lampola), approaches and methods of foreign language teaching (C. Macau, G. Broughton, C. Brumfit, R. Flavell, P. Hill, A. Pincas, J. Harmer), the role of languages for specific purposes in digital era (E. Bárcena, T. Read, J. Arús).

In recent years, legal base on reforming higher education and professional training of specialists of a new generation has been established and improved: the Law of Ukraine "On Higher

Education”, National Education Development Strategy in Ukraine till 2021, National Doctrine on Education Development in Ukraine in XXI century, etc.

The National Report “New Course: Reforms in Ukraine during 2010-2015” indicates that the strategic priority of the state language policy in Ukraine should be the formation of proper conditions for mastering the languages of international communication by Ukrainian citizens (Heiets, 2010, p. 59).

In European context two important documents have been developed in relation to language learning: Common European Framework of Reference for Languages (CEFR) and European Language Portfolio (ELP).

Knowledge of the foreign language by specialists in applied mechanics serves not only as a means of intercultural and interpersonal communication but also as an instrument that promotes contacts with foreign colleagues, information sharing in the sphere of professional activity, increase of competitiveness in the global labor market, student mobility and integral component of specialists’ professional training.

Radzeviciene (2004) regards student’s mobility during the studies at higher educational institutions as one of the main opportunities to gain international perspective for obtaining knowledge and skills needed for future work. Motivation, language training, consulting, academic tutoring, are essential means of increasing the student’s mobility (p. 109-112).

The important trend in the system of higher technical education is the attitude to foreign language training as to an integral functional component that contributes to the formation of students’ abilities to solve the professional tasks.

However, the previous studies were not concerned with the foreign language training of future specialists in applied mechanics. For this reason, **the aim** of this paper is to define the concept of professionally oriented foreign language training of future specialists in applied mechanics, in particular, to differentiate the concepts of “foreign language training”, “foreign language education” and “teaching foreign languages”, to identify the key peculiarities of foreign language training of future specialists in applied mechanics.

In the context of the objectives of our study, taking into account the lack of generally accepted understanding of the term of “foreign language training” in science, it is necessary to differentiate the terms “foreign language training”, “foreign language education” and “teaching foreign languages” because all of these concepts are of primary importance for our study.

**Concept analysis.** The need to consider the concept of “foreign language training” in relation to the concepts of “foreign language education” and “teaching foreign languages” is caused by the fact that these terms are often used simultaneously and interchangeably. The difference between them is not defined clearly. The related variables studied by the scientists are professional foreign language training, professionally oriented foreign language training, professional orientation of foreign language training, professionally oriented teaching of foreign languages.

As reported by Nitenko (2015), the lack of the definition of the term “foreign language training” leads to its replacement by the term “teaching of foreign languages” and identity with the term “foreign language education”. The author has come to the conclusion that the title of the discipline “Foreign language” should be changed for “Foreign language training” since this term reflects the essence and the tasks of the discipline better (p. 28-29).

To analyze different approaches to the definition of the above-mentioned terms, it is expedient to define the content of the concept of “education”.

The concept of International Standard Classification of Education 2011, 2013 (UNESCO, UNO) regards the notion “education” as the process that helps society transfer the accumulated information, knowledge, comprehension, views, values, skills, competences and experience from generation to generation purposefully (Zakharchenko et al., 2014, p. 40).

In “Ukrainian Pedagogical Dictionary” (Honcharenko, 1997) the term “education” is interpreted as a spiritual side of a person that is formed under the influence of moral and intellectual values, regarded as a property of person’s cultural surrounding and processes of education, self-education, influence, processing (a human individuality formation). However, the key point is the integration of knowledge with personal qualities, the ability to manage it individually (p. 241).

So, these definitions suggest that the term “education” has a culturological intention which represents the combination of spiritual and moral values for human progress.

Honcharuk (2011) treats the notion of “foreign language education” as an integral, organized process of students’ education and development in the context of the discipline “Foreign language” that promotes the creative and intellectual development of an individual (p. 77).

We share the standpoint of Khomenko (2012) who considers a foreign language as a means of not only interpersonal but also international communication that helps realize direct or indirect dialogue of cultures (p. 60).

According to CEFR, “a person studying foreign language becomes multilingual and develops his / her interculture” (Nikolaieva, 2003, p. 60).

The comparison of the notions “foreign language education” and “teaching foreign languages” shows that the first one is broader than the second one.

On the basis of the findings presented in the paper, we can underline that teaching foreign languages to future specialists in applied mechanics is defined as *professionally oriented foreign language training and regarded as a means of transmission of professional information, development of skills of using foreign sources in their professional activity.*

As reported by Maksymenko (2013), professionally oriented teaching of foreign languages is a direction of foreign language education focused on the formation of the complex of competences of an individual (foreign language communicative competence with an emphasis on professional competence) that combines professional and general foreign language knowledge and skills with the abilities of personal growth in intercultural interaction, public participation in future work and life in the conditions of multiculturalism (p. 5).

Byram (2008) underlines that the focus on communicative competence in foreign language education is not only the necessary means for interacting with people who speak other languages but also the source of learners’ awareness of linguistic and cultural identity (p. 182).

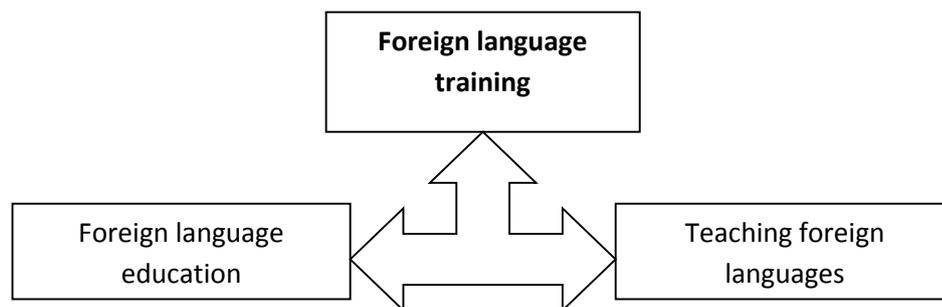
Bihych (2004) has concluded that the term “teaching foreign languages” should be replaced by the term “foreign language education” because these notions differ in aims and content.

The aim of foreign language education is students’ education by means of foreign language that makes a positive effect on their cultural enrichment and creative development (Honcharuk, 2011, p. 77), and the aim of teaching foreign languages is teaching a language as a means of communication among the specialists, the development of communication skills, learning the intercultural picture of the world of foreign language (Aleksieieva, 2007, p. 7).

The Thematic Working Group “Languages for jobs” (2011) reports that effective methods of communication and cultural awareness are important elements of foreign language training since intercultural competence, the ability to work and adapt to multilingual and multicultural teams and high level of communicative competence are highly demanded by the employers who adopt recruitment strategies for the specialists, paying attention to the fact that they work in multilingual society and compete in global labor market (p. 5, 13).

The detailed examination of the correlation of the notions of foreign language education and teaching foreign languages and the analysis of their difference allow us to argue that these notions are components of the concept of foreign language training. In this paper we consider the notion of foreign language education as a process of formation of students’ foreign language culture by means of the discipline “Foreign language” and teaching foreign languages as a process of transmitting and mastering foreign language knowledge, formation of special abilities and skills of foreign language practical acquisition.

The results obtained by Nitenko (2015) suggest that foreign language training is a synthesis of the notions of foreign language education with its processual aspects and components and teaching of foreign languages that provides a systematic process of foreign language mastering. Teaching of foreign languages is based on the interdisciplinary integration, the use of authentic materials, modeling of real communication situations considering individual characteristics, knowledge, abilities, skills and motives of an individual that enables to reach a high level of foreign language communicative competence, capable of providing intercultural interpersonal communication for solving professional tasks in multicultural, multilingual society (p. 29). This is illustrated in Fig. 1.



**Fig. 1. The correlation of the notions of “foreign language training”, “foreign language education” and “teaching foreign languages”**

In this study it was shown that further development of professionally oriented foreign language training system with consideration of European educational trends is possible in case of the transition from traditional interpretation of foreign language training as interrelated development of four language skills to modern interpretation of its strategic purpose as the formation of multicultural language professional personality ready for professional intercultural communication and self-development in modern information society (Nitenko, 2015, p. 8).

In our study, we assume that the main purpose of professionally oriented foreign language training of future specialists in applied mechanics is an ability to solve communication tasks in the sphere of their professional activity, to search and analyze the information for the study of foreign experience and work with the technical literature and documentation. That’s why foreign language is considered as a means of information activity, systematic replenishment of the professional knowledge, professional communication and professional culture in general.

Fitzpatrick, Lund, Moro and Rüschoff indicate that language learning is an interactive, dynamic process, in which new knowledge is most fruitfully acquired when learners are placed in a situation where they can explore sources and resources rather than in the context of mere formal instruction. Such approach will lead not only to a better understanding of linguistic facts and more effective acquisition of language proficiency, it will also lead to more learning competence as well as language awareness (p. 16).

However, the professionally oriented teaching of foreign languages is treated as “vocationally oriented language learning” in the Council of Europe’s Modern Languages Project. It is often seen as a part of English for Specific Purposes or Language for Specific Purposes (Vogt & Kantelinen, 2013, p. 62-69). Bárcena, Read and Arús (2014) point out that the development of Language for Specific Purposes (LSP) originates in English for Specific Purposes (ESP) (p. 5).

In terms of the mentioned facts, LSP is considered as a multidisciplinary activity that involves collaboration, engagement with disciplinary knowledge, interaction in authentic situations with realistic materials (Bárcena, Read & Arús, 2014, p. 3).

The Thematic Working Group “Languages for jobs” (2011) defines the notion LSP as a teaching method designed to meet specific (mainly professional) needs of the learner. For that reason, it always integrates the language learning and subject learning approaches. Great emphasis is put on the practical outputs of language learning (p. 12).

ESP involves the formation of specific skills for particular purposes. Day and Krzanowski (2011) outline that letter “P” in ESP means “a professional purpose” – a set of skills that learners need in their work or professional careers (p. 5).

Dudley-Evans and St. John (1998) define ESP through absolute and variable characteristics. Absolute characteristics are distinguished as the specific needs of the students, the use of peculiar methodology, the focus on language itself. Variable characteristics are as follows: the correlation with the specific disciplines, the use of professional work situations (p. 4-5). So, these characteristics are of special relevance to ESP and LSP teaching as they aim at preparing students to communicate effectively in real professional situations.

Therefore, it can be concluded that researchers who are engaged in the study of the problems of foreign language training of specialists in different areas of professional training emphasize on the definition of the notion depending on the sphere of their activity.

**Principles of foreign language teaching.** Regarding the ambiguousness of the terminology that is used for denoting the process of professionally oriented foreign language teaching, we consider it expedient to discuss the regulations of professional linguodidactics as its concept is focused on the investigation of the principles of professionally oriented foreign language teaching. The term “professional linguodidactics” is treated as a branch of linguodidactics that is concerned with the development of the methodology of professionally oriented foreign language teaching exploring the regularities and principles of interaction of teacher with the students studying a foreign language for professional purposes (Krupchenko & Kuznietsov, 2015, p. 37).

The following specific features of professionally oriented foreign language training of future specialists in applied mechanics have been distinguished in accordance with the specific principles of professional linguodidactics (Krupchenko & Kuznietsov, 2015, p. 47-220):

- internationalization;
- integration;
- interdisciplinarity;
- complex formation of foreign language professional competence;
- formation of orientation and motivation for future professional activity;
- foreign language professionalization;
- problem-based education;
- variation of educational content and technologies;
- modularity;
- continuity of foreign language training;
- multilevel training in terms of diversification of educational process;
- originality and authenticity of materials and activities;
- integrity of educational process;
- interaction;
- interconnected development of language skills.

The objective of our study makes us dwell on the principle of “foreign language professionalization” as the key principle of professionally oriented foreign language training of future specialists in applied mechanics that promotes the development of professional qualities (professional competence) in the process of foreign language learning based on the following factors (Krupchenko & Kuznietsov, 2015, p. 104):

1. Cognitive and informational – expand the volume of information in applied mechanics by means of foreign language;
2. Linguistic – develops four skills activities (reading, writing, speaking, listening) focusing on the formation of foreign language professional competence;
3. Professional – includes semantic (description of knowledge and skills provided by future specialty) and methodological (complex of means and methods that promote the formation of professional skills using foreign language) aspects;
4. Psycholinguistic – suggests promoting further study and professional growth and developing professional skills and mentality of specialists in the process of foreign language training with regard to the individual abilities of future specialists in achieving a certain level of foreign language professional competence. The communicative factor is of major importance as it helps to form foreign language communicative competence which is the purpose and the means of professionally oriented foreign language training.
5. Content and structural – involve mastering of a certain amount of learning content that is fundamental for the particular level of foreign language mastering and transition to the other level of improvement in the professionally oriented foreign language training.

The diversity of approaches to the understanding of the notion of “foreign language training” in psychological and pedagogical literature and the analysis of its principles have demonstrated that

these definitions can not be integrated in one concept that affords us ground to define the content of the notion of “foreign language training” on the basis of the purpose of our paper and consider it as professionally oriented foreign language training of future specialists in applied mechanics.

Based on the results, it can be concluded that professionally oriented foreign language training is an integral component of the professional training of future specialists in applied mechanics. Summing up different scientific and theoretical approaches to the definition of the notion “foreign language training”, we come to conclusion that *professionally oriented foreign language training of future specialists in applied mechanics is a process of teaching foreign languages oriented to the formation of foreign language professional competence for solving professional tasks in the sphere of applied mechanics.*

**Conclusions.** From the research that has been carried out, it is possible to conclude that:

- professionally oriented foreign language training of future specialists in applied mechanics is a process of teaching foreign languages oriented to the formation of foreign language professional competence for solving professional tasks in the sphere of applied mechanics;
- the features of professionally oriented foreign language training of future specialists in applied mechanics are: internationalization, integration, interdisciplinarity, complex formation of foreign language professional competence, formation of orientation and motivation for future professional activity, foreign language professionalization, problem-based education, variation of educational content and technologies, modularity, continuity of foreign language training, multilevel training in terms of diversification of educational process, originality and authenticity of materials and activities, integrity of educational process, interaction, interconnected development of language skills;
- the factors of professionally oriented foreign language training of future specialists in applied mechanics are: cognitive and informational, linguistic, professional, psycholinguistic, content and structural;
- the aim of foreign language education is students’ education by means of foreign language that makes a positive effect on their cultural enrichment and creative development, and the aim of teaching foreign languages is teaching a language as a means of communication among specialists, the development of communication skills, learning the intercultural picture of the world of foreign language.

The results show that professionally oriented foreign language training of future specialists is an integral part of the university syllabus of training specialists in applied mechanics who use a foreign language as a means of intercultural and international communication in the field of their professional interests and in the situations of social interaction. It, therefore, seems appropriate to indicate the possibilities for continued research in this area.

The next stage of our study will be experimental confirmation of our theoretical analysis of pedagogical conditions of professionally oriented foreign language training of future specialists in applied mechanics in higher technical educational institutions of Ukraine.

#### References:

- Bárcena, E., Read T. & Arús J. (2014) *Languages for Specific Purposes in the digital era*. Switzerland: Springer International Publishing. <http://dx.doi.org/10.1007/978-3-319-02222-2>
- Byram, M. (2008) *From foreign language education to education for intercultural citizenship: essays and reflections*. Clevedon, Great Britain: Cromwell Press Ltd.
- Day, J. & Krzanowski (2011) *Teaching English for Specific Purposes: an introduction*. Cambridge, UK: Cambridge University Press.
- Dudley-Evans, T., & M.J. St. John. 1998. *Developments in ESP. A multi-disciplinary approach*. Cambridge, UK: Cambridge University Press.
- Fitzpatrick, T., Lund, A., Moro, B. & Rüschoff B. (2003) *Information and communication technologies in vocationally oriented language learning*. Kapfenberg, Austria: Council of Europe Publishing.
- Howard, R. & Brown, G. (1997) *Teacher education for languages for specific purposes*. Clevedon, Great Britain: Multilingual Matters Ltd.
- Languages for Jobs. Providing Multilingual Communication Skills for the Labor Market / Report from the Thematic Working Group “Languages for Jobs”. *European Strategic Framework for Education and Training (ET 2020)* (2011). Retrieved from <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=3956&no=1>

- Radzeviciene, A. (2004) The elimination of obstacles to student mobility in engineering education. *8th Baltic Region Seminar on Engineering Education*, 109-112. WOS:000225187300022
- Vogt, K. & Kntelinen, R. (2013) Vocationally oriented language learning revisited. *ELT Journal*, 67, 62-69. <http://dx.doi.org/10.1093/elt/ccs049>
- Aleksieieva, L. (2007). *Metodika obunenija pprofesional'no orientirovannomu inostrannomu jazyku* [Methods of teaching professionally oriented foreign language]. SPb, Russia: Filologicheskij fakul'tet SPbGU.
- Bihych, O. (2004). *Metodychna osvita majbutnjogho vchytelja inozemnoji movy pochatkovoji shkoly: monohrafija* [Methodical education of future foreign language teacher of elementary school]. Kyiv, Ukraine: Vyd. centr KNLU.
- Heiets, V. (2010). *Novyj kurs: reformy v Ukrajinii. 2010–2015. Nacionaljna dopovidj.* [New course: reforms in Ukraine during 2010–2015. The National report]. Kyiv, Ukraine: NVC NBUV.
- Honcharenko, S. (1997). *Ukrajinsjkyj pedagoghichnyj slovnyk* [Ukrainian pedagogical dictionary]. Kyiv, Ukraine: Lybidj.
- Honcharuk, Yu. (2011). Osnovni pidkhody do vyznachennja zmistu inshomovnoji osvity u VNZ Ukrainy [The main approaches to the determination of the content of foreign language education in higher educational institutions of Ukraine]. *Naukovi praci Chornomorsjkoj derzhavnogho universytetu imeni Petra Moghyly. Ser.: Pedagoghika*, 158 (146), 75–82.
- Khomenko, O. (2012). Inshomovna pidghotovka jak nevid'jemnyj skladnyk vyshhoji osvity v umovakh ghlobalizaciji ta informatyzaciji suspiljstva [Foreign language education as an integral component of higher education in the conditions of globalization and informatization of society]. *Vyshha osvita Ukrainy*, 2, 55–61.
- Krupchenko, A., & Kuznietsov, A. (2015). *Osnovy professional'noj lingvodidaktiki* [The bases of professional linguistics]. Moscow, Russia: APKiPPRO.
- Maksymenko, O. O. (2013). *Orghanizacijno-pedagoghichni zasady profesijno-orijentovanogho navchannja inozemnykh mov u krajinakh jevropejskogho sojuzu* [Organizational and pedagogical bases of vocationally oriented language learning in the EU countries]. Extended abstract of PhD thesis, Kyiv, Ukraine.
- Nikolaieva, S. (2003). *Zaghalnojevropejski Rekomendaciji z movnoji osvity: vyvchennja, vykladannja, ocinjuvannja* [Common European framework of reference for languages: learning, teaching, assessment]. Kyiv, Ukraine: Lenvit.
- Nitenko, O. (2015) *Inshomovna pidghotovka fakhivciv prava v trycyklovi systemi vyshhoji osvity: jevropejskyj dosvid* [Foreign language training of the future lawyers in frame of the three-cycle higher education system: European experience]. Kyiv, Ukraine: Centr uchbovoji literatury.
- Zakharchenko, V., Kalashnikova, S., Luhovyi, V., Stavitskyi, A., Rashkevych, Yu., & Talanova, Zh. (2014). *Nacionaljnyj osvitnij ghlosarij: vyshha osvita* [National educational glossary: higher education]. Kyiv, Ukraine: TOV “Vydavnychij dim “Plejady””.

Received: 13.03.2016

Accepted: 15.05.2016