Theoretical and methodological principles of teaching linguists: the Ukrainian case

Principios teóricos y metodológicos de la enseñanza de los lingüistas: el caso ucraniano

Received: September 1, 2022  Accepted: October 2, 2022

Written by:
Kateryna Yakushko101
https://orcid.org/0000-0001-6977-8441
Iryna Haidai102
https://orcid.org/0000-0003-3180-1479
Yuliia Hariunova103
https://orcid.org/0000-0002-9201-691X
Olena Pryshchepa104
https://orcid.org/0000-0002-0664-3301
Dmytro Marieiev105
https://orcid.org/0000-0002-6282-8052

Abstract

Technological progress has become a catalyst for the emergence of such interdisciplinary fields as linguistics and for the need for relevant specialists in the labor market. The purpose of this article is to analyze the theoretical and methodological aspects of linguists’ training in Ukraine. The latest scientific researches and publications on the subject of training linguists in both domestic and foreign educational institutions were analyzed. The methods of system analysis, critical analysis of scientific and methodical sources, search, generalization, and structural-functional method were used for this study. The article highlights the structure, features, and principles of linguists’ education on the basis of educational and professional programs of Ukrainian universities. The purpose of the training is to educate specialists which are able to navigate freely in various linguistic theories, carry out scientific analysis of language material, apply theoretical knowledge, strategies and methods (including innovative ones). The analysis of the education of linguistics students

Resumen

El progreso tecnológico se ha convertido en un catalizador para la aparición de campos interdisciplinarios como la lingüística y para la necesidad de especialistas relevantes en el mercado laboral. El objetivo de este artículo es analizar los aspectos teóricos y metodológicos de la formación de lingüistas en Ucrania. Se han analizado las últimas investigaciones y publicaciones científicas sobre el tema de la formación de lingüistas en instituciones educativas tanto nacionales como extranjeras. Para este estudio se utilizaron los métodos de análisis de sistemas, análisis crítico de fuentes científicas y metódicas, búsqueda, generalización y método estructural-funcional. El artículo destaca la estructura, las características y los principios de la formación de los lingüistas sobre la base de los programas educativos y profesionales de las universidades ucranianas. El objetivo de la formación es educar a especialistas que sean capaces de navegar libremente por diversas teorías lingüísticas, realizar análisis científicos del material lingüístico, aplicar conocimientos teóricos, estrategias y métodos

101 Candidate of Pedagogical, Associate Professor National University of Life and Environmental Sciences of Ukraine, Faculty of Humanities and Pedagogy, Department of English for Technical and Agrobiological Specialties, Ukraine.
102 Candidate of Pedagogical Sciences, Senior Lecturer Zhytomyr Polytechnic State University, Faculty of Public Administration and Law, Department of Foreign Languages, Ukraine.
103 Candidate of Philological Sciences Teacher of Ukrainian language and literature at the Kharkiv Lyceum “Liberty School” of the Kharkiv region, Ukraine.
104 PhD in Philological Sciences, Senior lecturer of the Department of Foreign Languages the Department of Foreign Languages Zhytomyr Polytechnic State University, Ukraine.
105 PhD in Philology, Docent Associate Professor at the Department of Ukrainian Language, Literature and Methods of Teaching Oleksandr Dovzhenko Hlukhiv National Pedagogical University; Academic and Research Institute of Philology and History; Department of Ukrainian Language, Literature and Methods of Teaching, Hlukhiv, Ukraine.
proved that the structuring of the components of the theoretical part of the educational process is based on fundamentalization and the principles of subject specialization, while the selection of teaching methods focuses on the need to train competent specialists with practical skills. The basis of such training is based on student-centered, competence-based, systemic, integrative approaches using innovative, interactive technologies, which allows training specialists capable of effectively carrying out professional, scientific and innovative activity, integrating modern information and communication technologies.

Key words: linguistics, linguist, educational program, universities, Ukraine.

Introduction

The result of rapid technological progress and the need to improve the interaction between humans and technology is the integration of different fields of science. In the relatively short span of the twenty-first century, a number of new disciplines of an integrated type have been founded, creating a need for specialists in such disciplines.

As linguistics has undergone significant changes with the advent of technological advances, one of the most relevant is the symbiosis of the humanities and technical disciplines. This is a direct result of the fact that a process formerly led entirely by one person has now evolved into a complex set of new technologies and human labor. And so, this marketplace is uniquely positioned to help businesses benefit from multilingual services combined with innovative technology.

An example of such a field is linguistics, a subfield of philology. Linguists are language technologists - professionals who process, research language, use scientific methods, hypothesize and compare, experiment, and observe and invent innovative solutions in the field of linguistics. The activities of a linguist are quite varied and wide-ranging. It allows the specialist to realize his/her possibilities in many fields of activity, in particular, in the field of information technologies, mass media, commercial activity, and advertising. Therefore, there is obviously a rather high demand for this kind of specialist in the labor market.

One of the most important indicators of each state is the quality of education, it also determines the technological and informational level of any society. That is why education plays a key role in the search for specialists in the field of linguistics.

Literature review

In the realities of the growing volume of scientific information, special attention is paid to the rational construction of the learning process in a higher educational institution. The growing requirements to the level of general cultural and special training of linguists lead to the need to improve the professional training of a linguist. So, the study of possibilities and ways to improve the education of linguists is conducted by a number of scientists (Bidyuk et al., 2018; Komochkova, Dorofeyeva, 2019; Svyshch, 2021). This study aims to analyze the educational professional training of linguists in the leading universities of Ukraine. The basic theoretical foundations of education of linguistic students were determined and the importance of educational disciplines for the formation of the level of knowledge of students was analyzed. The methods of training used by the universities and a number of skills that students can master with the help of such methods have been identified. And also, the article cites a number of innovations implemented by Ukrainian universities to meet the level of training international standards.
The analyzed recent studies and publications show that the topic of higher education research is the fundamental basis of the works of both domestic and foreign scholars (Relvas, 2020; Santos et al., 2019). Among them, the works that are based on the method of comparison of education in Ukraine and other countries (Levrints, 2020; Yuzyk, Mazaikina, Bilanych, & Yuzyk, 2019) should be highlighted.

The introduction of new technologies provides an opportunity to adapt them to improve the training of specialists in different industries (Dyka et al., 2019; Ikonnikova & Komochkova, 2019; Nikitova et al., 2020). An example of such technologies are information and communication technologies, which are a tool capable of contributing to the quality presentation of educational material, complementing and expressing educational content with illustrative and interactive elements. Ukrainian scientists are successfully studying such a tool and its use in the educational process of students (Koroliova et al., 2021; Kulichenko & Polyzehayev, 2020).

A number of scientific publications (Alexeyev, Alexeyeva, & Syniova, 2021; Onishchuk et al., 2020; Holikova, 2021; Bezliudna et al., 2020; Knyazyan & Mushynska, 2019) are dedicated to the educational process of linguists in Ukrainian and foreign universities.

In order to improve the skills of future linguists, scholars are constantly bringing in and analyzing the latest methods of the educational process (Shcherbak et al., 2022).

Methods

The following research methods were used to achieve the set objectives: system analysis, critical analysis of scientific and methodological sources, search, generalized, structural, and functional. Also, for a detailed analysis of the training of specialists from the field of linguistics in the course of the study, information on the linguistics curricula of a number of Ukrainian universities was used: Taras Shevchenko National University of Kyiv, Lesya Ukrainka Eastern European National University, Kyiv National Linguistic University, Lviv Polytechnic National University, etc.

Results and discussion

Higher education in Ukraine is constantly undergoing modernization and reform in accordance with the European educational standards defined by the Bologna Convention (Baldyniuk et al., 2021). These changes have led to the introduction of credit-modular organization of the educational process and the harmonization of the combination of a number of academic disciplines to improve the educational process.

Linguistics includes the following key sciences: phonetics, phonology, morphology, syntax, semantics, pragmatics, and discourse (Lapshyna & Dorofeyeva, 2021). But since in practice the boundaries between these spheres are not clearly delineated, higher education institutions (“HEIs”) in Ukraine use and constantly update educational programs that are characterized by balancing between these spheres.

Professional training of linguists in Ukrainian universities is of a combined nature and is largely adapted to the needs of students as future specialists. It responds flexibly to socio-cultural changes and gives students a framework of knowledge, with the latter being able to adapt to the rapidly changing labor market.

The training of specialists in linguistics includes an extensive network of different types of institutions: universities and colleges of different forms of ownership. For example, linguists are educated at a number of universities in Ukraine: Taras Shevchenko National University of Kyiv, Lesya Ukrainka Eastern European National University, Kyiv National Linguistic University, Lviv Polytechnic National University, and others. The results of the study show that linguists, after completing the program of education and qualification level “Bachelor” and/or “Master”, can work in a wide range of areas: education (teaching and administrative activities, consulting), business and industry (translation, analysis, research activities), management, etc.

Besides the challenge of constantly renewing the educational program, in order to keep up with the technological development, vocational education must create competitive individuals capable of contributing to the development of science, solving complex problems in the field of philology, finding innovative solutions, providing intercultural communication and its translation support. In this case, the focus of the educational program is to train those professionals who can realize themselves in the labor market in the current conditions: scientific and technological progress; internationalization of education and the process of European integration; transformation of the labor market; comprehensive intellectual, professional,
creative and social development of the individual in the educational and scientific environment.

According to these requirements for educational and professional programs, Ukrainian educational institutions cite a number of competencies that students can master during the training, including: the ability to carry out scientific analysis and structuring of language and speech material; the ability to automatically work through natural language, its analysis, synthesis, recognition of the sound language code, morphological and syntactic analysis of texts; ability to master and apply innovative methods, forms and ways of organizing training.

In order to facilitate the development of professional abilities in language students that correspond to the above competencies, HEAs use a number of theoretical and methodological foundations of training analyzed in this study. The main foundations of such education are consistency, continuity, and alignment between the theoretical and practical components.

The educational program is based on specialized fundamental training of specialists in linguistics and has a combined orientation, containing academic, applied, and research. It is based on generally known provisions and results of modern scientific linguistic research.

The purpose of the educational and professional program is to provide a high level of scientific and practical competence, capable of effectively solving a number of topical problems in research, professional and practical, and organizational and managerial activities.

There are two forms of linguistics education in Ukraine: classroom and extracurricular. The classroom form includes lectures, workshops, seminars, and trainings. Out-of-classroom forms include consultations, self-study, individual studies, preparation of qualification papers, translation, and assistantships.

The curriculum is focused on special education, professional and scientific training in the fields focused on the formation of algorithms for coding, recognition, interpretation, generation/production, language and speech processing, translation, ensuring intercultural communication, formation and/or creation of linguistic support of various systems development of natural information and development of information work automation systems.

Theoretical training of linguists includes two conditionally separated theoretical parts: the study of general educational disciplines; mastering the disciplines of professional direction. Consequently, this differentiation aims to form and develop the foundation of students' knowledge regardless of the specialty.

Having analyzed a number of curricula of the above-mentioned Ukrainian HEIs, we can conclude that the content of linguistic training programs is tightly bound to the theoretical linguistic component, the framework of which is similar to the majority of Ukrainian HEIs. At the same time, the main component of such programs is a cycle of socio-humanitarian disciplines and professional disciplines, which, according to the Bologna system, are mandatory or selective.

The cycle of socio-humanitarian disciplines involves the development of general educational competence by mastering such areas of knowledge as philosophy, history, sociology, political science, art, literature, economics, and others.

The cycle of professional disciplines plays an important role in the formation of professional competence, based on such educational disciplines as country study, the practice of grammar, the practice of phonetics, interpersonal communication, writing practice, oral speech, history, and literature of the country whose language is studied. A significant part of the educational program is devoted to mastering modern information technologies, working with a variety of computer and Internet programs.

The required modules include the key subfields of linguistics. These include phonetics, phonology, semantics, syntax, pragmatics, morphology, and principles, and methods of linguistic research. Elective modules may include such subfields as sociolinguistics, psycholinguistics, neurolinguistics, cognitive linguistics, and stylistics. There are also a number of electives for students to choose from. For example, Ukrainian lexicography, gender studies elective, foreign language teaching methodology for professional direction. Depending on the educational program and the institution, required and elective courses may vary.

Most HEIs in Ukraine have elective disciplines, which take up to 35% of the total load. Although in practice it is typical to teach a stream of students on the general curriculum and a small
percentage of elective subjects. It should be noted that a recurring phenomenon is that the educational program is often concluded with a focus on the teacher, which leads to the completion of the content of training programs without taking into account the needs of the labor market.

The disadvantages of the theoretical part of the program should also include the lack of opportunity for students to choose their own teachers and the order of study of disciplines. This approach does not take into account the level of professionalism of individuals and does not stimulate healthy competition among the faculty.

To illustrate, let us analyze the educational and professional program of the Taras Shevchenko Kyiv National University for the Bachelor's degree in Applied Linguistics. The mandatory components of such a program are: general scientific disciplines in the social-humanitarian sphere; general philological and historical disciplines; English language disciplines; disciplines in theoretical and applied linguistics; mathematical disciplines; disciplines in information technologies.

In this program, the elective module is limited because the student has a choice between only two blocks of disciplines: “Computer Modeling of Verbal Communication and Second Foreign Language” and “Computer Construction of Lexicographic Systems and Second Foreign Language”.

Consequently, we can conclude that although students do not have the opportunity to formulate a personal curriculum, the general concept of this training is determined by the orientation towards the interdisciplinary nature of the skills and knowledge that future specialists in applied linguistics must possess. Since the selected courses presuppose theoretical awareness of linguists along with the ability to use the knowledge in practice in the development of software for automatic linguistic analysis. At the same time, it should be noted that the axis of learning, which, by the way, is typical for different Ukrainian universities regarding the training of specialists in the considered specialization, is computer linguistics, and the problem of mastering linguistics comes to the background. Such practice requires a balanced revision of applied linguistics specialization in Ukraine as a whole, as it does not correspond to general world tendencies of philological education.

A compulsory part of the training process of linguists in higher education institutions is an internship conducted under the supervision of the leading scientific and pedagogical staff of the department. Students can carry out such practice on the basis of the university, linguistic laboratories, partner companies, government agencies, translation agencies, travel agencies, leading IT companies, etc. Based on the future specialist’s specialty, the internship can be educational, computer and speech, computer and linguistic, translation, etc.

Educational practice is aimed at learning to use information technologies in professional activity. Educational practice aims to develop flexibility of students’ thinking, phonemic hearing, and plasticity of the articulatory apparatus; mastering the culture of speech and etiquette norms; formation of necessary competences corresponding to the requirements of educational standard.

Computer-linguistic practice is aimed at forming the skills of working with computer programs for automatic text processing; the use of different machine translation systems; the ability to adapt the text to machine translation.

The main goal of computer-linguistic practice is for students to acquire the knowledge and skills of linguistic analysis of the use of computer technology, as well as the search for effective solutions for the preparation and presentation of research papers.

Translation type of practice is aimed at the formation and development of abilities and skills necessary for the organization of translation activity. The aim of such practice is: application of acquired knowledge and improvement of translation skills; development of creative initiative; mastering of modern technologies and forms of translation depending on the type of organization.

According to the educational programs of the above-mentioned universities, another mandatory component of professional training is coursework. The term paper is an independent scientific research conducted by the student and the purpose is to demonstrate in-depth knowledge of the chosen topic, which must be logically arranged and formulated. This type of work is aimed at independent analysis, elaboration of theoretical sources of the specified problems, and/or creative performance of a linguistic task of a practical nature. Regardless of specialization, this aspect of preparation should
prepare the linguistic student to conduct structured work on the chosen topic: selection of sources for processing, logical planning, use of mastered disciplines, and skills in writing.

Based on the studied educational programs of educational institutions in Ukraine, the main principle of the theoretical part of linguist training is systematic and professional orientation. In general, the matrices of training courses focus on a deep scientific understanding of language as a means of communication, its origin and function, as well as the formation of linguistic, communicative, linguistic, and cultural competence. For an example of a training matrix, Table 1 presents a plan of the training process for higher education applicants in “Applied Linguistics (English Language)” specialty of Zhytomyr Ivan Franko State University.

### Table 1.
**Training matrix for linguists**

<table>
<thead>
<tr>
<th>1. General Training Cycle</th>
<th>1.2 Disciplines of the university's own choice</th>
<th>1.3 Disciplines of the student's free choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Compulsory academic disciplines</td>
<td>A cycle of socio-humanitarian disciplines (Ukrainian Language, Practical English Grammar, Higher Mathematics, etc.)</td>
<td>Пять дисциплин свободного выбора студента из перечня предложенного университетом</td>
</tr>
<tr>
<td>1.2 Disciplines of the university's own choice</td>
<td>A cycle of socio-humanitarian disciplines (Fundamentals of Medical Knowledge and Life Safety, Socioecology and Environmental Ethics, Physical Education, etc.)</td>
<td></td>
</tr>
<tr>
<td>1.3 Disciplines of the student's free choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. General Training Cycle</td>
<td>2.2 Disciplines of the university's own choice</td>
<td>2.3 Disciplines of the student's free choice</td>
</tr>
<tr>
<td>2.1 Compulsory academic disciplines</td>
<td>A cycle of professional disciplines (Foundations of Structural Linguistics, Corpus Linguistics, and Lexicography, Probability Theory, etc.)</td>
<td></td>
</tr>
<tr>
<td>2.2 Disciplines of the university's own choice</td>
<td>Coursework in applied linguistics</td>
<td></td>
</tr>
<tr>
<td>2.3 Disciplines of the student's free choice</td>
<td>Coursework on programming</td>
<td></td>
</tr>
<tr>
<td>3. Practice</td>
<td>Homework on the theory and practice of translation from English)</td>
<td></td>
</tr>
<tr>
<td>Educational practice to develop phonological competence (English)</td>
<td>Qualification work</td>
<td></td>
</tr>
<tr>
<td>Training practice to develop phonological competence (German)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational practice of interpreting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational practice in programming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial (interpreting) practice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: authors' own development

It is necessary to take into account the fact that the volume of knowledge is growing exponentially. Therefore, for mastering the basic knowledge and forming the necessary skills the methodological foundations of training are as important as the theoretical ones.

Currently, teachers in Ukraine are actively using new approaches and innovations in the process of training specialists, as properly chosen methods of teaching have a positive impact on motivation and increase the level of cognitive activity of students.

In all of the analyzed linguist training courses, teaching methods are designed to achieve progress, consistency, and balance, and reflect the specific goals and emphases of the educational programs. The researched academic programs clearly demonstrate the links between the methodological foundations of specialist training and the specific goals of such a program.

Modern methodologies and technologies of educational and training programs are focused not only on the assimilation of ready knowledge but also on its development in the process of student and teacher co-operation, as well as the
formation of practical skills, necessary for a specialist.

Let us consider the methodological foundations of the training of specialists in linguistics, which formed the basis of most educational programs of Ukrainian educational institutions.

The explanatory-illustrative method is used to convey a considerable amount of information. It involves acquiring knowledge by listening to lectures, stories from academic and methodological literature, and perceiving information from a manual in electronic form. With this methodology students remain within the framework of reproductive thinking, comprehending and perceiving facts and conclusions.

To assimilate practical skills in linguistics training, a reproductive method is used. In doing so, students need to apply the studied material, the method of linguistic research, or reproduce a learned linguistic analysis based on a sample or rule. In this way, future specialists learn to act according to the developed algorithm - according to instructions, rules, or orders - in situations similar to the presented sample.

When using the method of problem statement, the teacher before presenting the material clearly formulates the problem, defines the cognitive task, then, explaining the system of evidence, comparing different approaches and views, shows the way to solve the problem. This method contributes to the education of specialists who are able to create a structural and semantic algorithm of scientific research and implementation of the tasks set.

The research method is used to involve students and manifest their initiative, creative search, and independence. In this case, after setting the task, analyzing the task, and brief oral and written instruction, students of linguistics should independently study the literature, sources, make an observation, etc.

The discussion method of training is focused on the development of students' creative thinking and promotes independent decision-making, self-reflection on own ideas and approaches, construction of consistent actions, the ability to think critically, to argue, and to interact with other participants in the discussion. In preparation, the following forms of discussions are used: “round table”, “expert group meeting”, “forum”, “symposium”, “debate”, “court session”, “aquarium”.

Game technologies allow the most complete realization of the personal approach in various pedagogical situations, form the ability to apply the acquired knowledge to practical cases, and also contribute to the development of personal potential. Interactive methods of learning include, for example, such as working in pairs, the method of interviewing, sharing experiences, etc.

Exploratory learning strengthens the creative component of the educational process, contributes to the creation of educational products, assimilation of basic knowledge, and construction of one's own educational trajectory. This type of learning can include group, paired classes, self-education, mutual learning, tutoring, distance learning.

Project-based learning technology, as a rule, integrates information from different academic disciplines and promotes the emergence of individual projects of students and teaching them how to solve projects.

Trainings (case technology), the purpose of which is the formation of professional competencies, the involvement of communicative and creative abilities of students through the analysis of specific cases.

The methods and technologies used in lectures, practical classes, and self-study aimed at developing such abilities as the ability to see problems, analyze and transform information, put forward hypotheses, and carry out independent search and research activities were analyzed.

The improvement of scientific and methodological training of specialists in linguistics is also promoted by informatization and technicalization, because with the rapid development of technology increases and the radius of their application in the educational process. The organization of the educational process using innovative technologies is regulated by both educational programs of educational institutions and regulatory documents on the standards of training specialists in various fields. Thus, the Law of Ukraine “On Higher Education” states that the training of specialists should harmoniously combine educational, scientific, and innovative activities.

When forming competent specialists capable of creating electronic language resources, applying technology to process natural information,
developing language technologies and new methods for solving practical tasks in the field of language use; applying, editing, abstracting, and systematizing different types of texts (including professional, state and foreign languages) it is necessary to involve the wide range of available technologies.

Over the past few years, the material and technical base of Ukrainian universities has been significantly upgraded, creating all the conditions for comfortable and high-quality learning for students. Lecture classes are held in multimedia classrooms equipped with modern technical means of education: multimedia projectors and boards, specialized screens for displaying information, powerful sound systems.

Training laboratories provide scientific and methodological activities in accordance with the programs of training specialists, research within the approved scientific directions of the departments, and implementation of research results in practice, the work of creative teams created to solve a particular scientific problem.

In the preparation of specialists capable of scientific and innovative searches in the field of philology, their presentation to the professional and/or scientific community, and the protection of intellectual property on the results of research, the academic disciplines are provided with appropriate educational-methodical complexes. Students have access to university and other scientific and information databases, in particular Scopus and WoS. Considering that we can conclude that the training of specialists is conducted with the use of domestic and foreign experience.

Conclusions

The study analyzed the educational professional training of specialists in linguistics in Ukraine. This study was carried out using the method of system analysis, critical analysis of scientific and methodological sources, search engine, generalization, as well as structural and functional method. The results of the study showed that during the training of specialists capable of applying the acquired knowledge and methods of effective professional activity implementation, educational institutions of Ukraine apply a structured classification educational matrix, the components of which are the framework of scientific disciplines, teaching methods, and innovative technologies used during the training.

During the review of educational programs, it was found that although the theoretical aspect of linguistic training a priori consists of compulsory and elective modules, de facto there is a small degree of freedom of choice of disciplines. At the same time, it is determined that certain disciplines allow to create an appropriate scientific and theoretical basis, necessary for in-depth knowledge and understanding of linguistic theories, concepts, and directions of linguistic science in Ukraine and the world.

The principles of training of this kind of specialists is a complex of scientific theories, concepts, methodologies, and concepts of philology in relation to the theory and practice of translation, psychological and pedagogical model of knowledge, based on an interdisciplinary approach in accordance with the specifics of the future professional activity.

Considered a number of methods of professional training of specialists in linguistics, actively used by Ukrainian educational institutions and contribute to the assimilation and analysis of training materials, identification of problems, search for alternative solutions, providing high-quality professional training.

It has been substantiated that the Ukrainian model of education of students of linguists provides an active application of innovative technologies that ensure the ability of future specialists to effectively carry out professional and scientific-innovative activities, integrating modern information and communication technologies.

The study of educational programs of linguistics training in Ukrainian universities allows to assert that they are based on the provisions of information, competence, and functional approaches, as well as the principles of modularity, subject specialization, interdisciplinarity, fundamentalization taking into account the linguistic challenges of our time and the requirements of the standard for the specialty “Linguistics”.

Bibliographic references


