The system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities

El sistema de enseñanza de una lengua extranjera como factor en el desarrollo de la competencia profesional de los estudiantes de universidades no lingüísticas

APANASYUK, Larisa A. ¹
KAZIAKHMEDOVA, Svetlana Kh. ²
SMIRNOVA, Elena V. ³
METELEVA, Liliya A. ⁴
PLAKHOVA, Olga A. ⁵

Abstract
The relevance of the research topic in the article is due to the need to train highly qualified specialists of various profiles who are able to work in the international labor market. The purpose of the study: to develop and justify a system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities. The novelty of the study is that in the work: the theoretical and practical foundations of designing a system of teaching a foreign language, aimed at developing the professional competence of students of a non-linguistic university, are determined. The main conclusion is made: the foreign language teaching system developed in the study is presented as a factor in the development of professional competence of students of non-linguistic universities.

keywords: system of teaching a foreign language, factor in the development of professional competence, interactive methods, forms and means of teaching a foreign language.

Resumen
La relevancia del tema de investigación en el artículo se debe a la necesidad de capacitarse altamente calificados especialistas de varios perfiles que puedan trabajar en el mercado laboral internacional. Objetivo: desarrollar y justificar un sistema de enseñanza de una lengua extranjera como factor en el desarrollo de la competencia profesional de los estudiantes de universidades no lingüísticas. La novedad del estudio es que en el trabajo se determinan los fundamentos teóricos y prácticos del diseño de un sistema de enseñanza de una lengua extranjera, destinado a desarrollar la competencia profesional de los estudiantes de universidades no lingüísticas.
profesional de los estudiantes de una universidad no lingüística. Se llega a la conclusión principal de que el sistema de enseñanza de lenguas extranjeras desarrollado en el estudio se presenta como un factor en el desarrollo de la competencia profesional de los estudiantes de universidades no lingüísticas. **Palabras clave:** sistema de enseñanza de una lengua extranjera, factor en el desarrollo de la competencia profesional, métodos interactivos, formas y medios de enseñanza de una lengua extranjera.

---

### 1. Introduction

The current state of training of qualified personnel in the higher education system of Russia in accordance with the increasing complexity of the goals, means and structure of educational and cognitive activity involves improving the process of teaching a foreign language, which will expand the volume and increase the strength of knowledge, skills of students, the formation of their creative abilities, necessary for development of professional competence.

#### 1.1. The urgency of the research problem

Normative documents regulating the activities of universities in Russia (statutes, regulations, and job descriptions), have high level of requirements to future specialists of different profiles: professional knowledge and skills, ability to flexible their application, initiative, interpersonal skills. In the end, in the process of learning a foreign language it is necessary to lay the foundations for future professional activities, stimulating the development of motives.

However, the existing nature of learning a foreign language in University is not always conducive to the strengthening of the installation on the professional choice of the student and brings discord to the development of professional competence of future specialists, preventing its inclusion in the creative search of ways of solution of professional problems and adapt to future activities in the framework of cooperation with foreign colleagues. At the same time that professional activities have a differential impact on personality structures that are included in it.

The subject of our interest is the system of learning a foreign language as a factor of development of professional competence of students of non-linguistic universities.

It seems that a new model system of language learning, involving as a result of the development of professional competence should be based on the unity of theoretical and practical readiness for foreign language communication, which is reflected in its normative part. A non-normative part of the model is the process of professional self-expression in the dialogue of cultures, which requires the knowledge of a foreign language, its use for competent solution of professional tasks.

Note that knowledge of a foreign language becomes one of the important requirements of specialists in modern conditions. Today, significantly changing the requirements to the level of the specialists of different qualifications in a foreign language. The paramount importance of practical skills that require knowledge of a foreign language of business communication in oral and written speech, ability to use it in their professional activities.

The academic discipline "Foreign language", being integrative in its intent, and interdisciplinary training on substantive content, must play a leading role in expanding the educational horizons of students, in the process of socialization of the future specialist, preparing them for life in a multi-ethnic and multicultural world.

Therefore, learning a foreign language becomes one of the leading components of the higher education system.
However, in non-linguistic universities (higher educational institution where the foreign language is not major in vocational training) the capabilities of this discipline in the development of professional competence of future specialists of various profiles are not implemented sufficiently. Non-linguistic faculties prepare a specialist who knows the special disciplines, while professional sphere makes the graduate of the broader requirements in the area of international cooperation.

The study of the state of foreign language teaching in nonlinguistic universities shows that the level of foreign language proficiency of their graduates does not meet modern requirements of society. The cause of the current situation lie in the lack of elaboration of the problems of foreign language teaching of students of non-linguistic universities in close connection with the obtained profession, with the requirements of international labour market; the number of hours allocated to foreign language learning; the nature of the educational process and content of teaching materials.

Examination of the relevant provisions of the pedagogy and methodology of teaching foreign languages, the relevance and the need to solve the marked problem:

- The scientific principles of the formation of mobile specialist at the international labour market (Apanasyuk, Soldatov, Kireeva & Belozertseva, 2017; Merkulova, Smirnova, Kaziakhmedova & Kireeva, 2018);
- Theoretical foundations about the nature of professional competence (Shlangman, 2004; Khutorskoy, 2005; Berezhnova, 2006);
- issues of theory and methods of teaching professionally-oriented foreign language based on the communicative approach, explored Ivanova, 2000; Graboi, 2002; Galskova &Gez, 2004; Borytko, 2008.

In addition, as the analysis of practice, in the last decade more and more clearly delineated significant contradictions between:

- the social order of society on the specialist who have practical skills of using foreign languages in their professional activities, and practice of teaching foreign languages in non-linguistic universities;
- Sharply increased need of the individual to increase the level of foreign language skills, on the one hand, and a failed system of foreign language teaching in nonlinguistic universities, on the other;
- Persistent trends in the content of traditional higher education, focusing their attention on the information saturation of educational process and orientation informative and technological sides of the education to prepare professionally competent individuals.

Thus, the problem consists in the resolution of the contradiction between the significance of professional competence of students and the insufficient level of ensuring this competence in Non-language University in learning foreign language. This led to the choice of the topic of our research "the System of teaching foreign language as a factor of development of professional competence of students of non-linguistic universities".

2. Methodology

In our study, the theoretical and practical foundations of the essence of the system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities are previously considered.
2.1. Theoretical foundations of a system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities

Theoretical and methodological basis of the study were:

- theories of continuing professional education (Pluzhnik, 2003; Morozova, 2010);

- the scientific position of a systematic approach to the training of specialists in various fields (Schukin, 2006; Aleinikova, 2020);

- ideas of pedagogical design (Faevtsova, 2006; Schukin, 2012);

- works of domestic authors on improving a foreign language education based on a communicative approach (Galskova, 2000; Deryabina, 2013; Kireeva, Apanasyuk, Grigor'eva, Bogatyreva, & Alekseeva, 2018; Kozulyaev, 2019; Kharlamenko, 2020).

As a result of theoretical and methodological research, the following provisions were obtained:

1. The conceptual principles of designing a foreign language teaching system as a factor in the development of professional competence of students of non-linguistic universities include: the principle of professional orientation; a systematic approach to training specialists of various profiles; pedagogical design ideas; communicative approach in teaching a foreign language.

2. The model of the system of foreign language teaching, promoting the development of professional competence of future specialists. The essence of the model is a consistent transition from the analysis of socio-economic ordering of society, personal interests and needs of students to the design of the pedagogical process of formation of demanded knowledge and skills in the field of foreign language as an integral part of professional competence. The result of the functioning of society gets professionally competent, competitive specialists who have practical skills in using a foreign language for further self-development of personal qualities, professional development and career growth.

The backbone component is the principle of professional orientation, which defines the goals, structure, content, methods, forms and means of teaching a foreign language. The principle of professional orientation allows you to synchronize the stages of learning a foreign language.

3. To the pedagogical conditions of successful realization of the model of our study include:

- building a course structure that combines two components (common language - General English and language for specific purposes - Language for Specific Purposes);

- the selection of content of educational material in the logic of the discipline and the logic of the future professional activity;

- the use of interactive forms and methods of training aimed at providing communicative competence;

- development of individual educational routes.

The reliability and validity of the results of the study provided a research methodology adequate to the purpose, subject and objectives; the combination of theoretical analysis of the problem from a practical (experimental) implementation of the system of foreign language teaching of students of non-linguistic universities, contributing to the development of their professional competence; the results of experimental verification confirmed by methods of mathematical statistics.
2.2. Implementation of a foreign language teaching system as a factor in the development of professional competence of students of non-linguistic universities during experimental training

To solve the tasks and test the hypothesis, we used a set of mutually complementary research methods that are adequate to its subject: analysis of literature on the research problem, methodological documentation and legal acts; the study of the state of the problem in existing practice; modeling; pedagogical observation, conversation, interviewing, questioning, diagnosis, testing; ascertaining and formative experiments; analysis of student work; mathematical data processing.

The experimental work was carried out on the basis of Russian non-linguistic universities: "Russian State Social University", "Moscow State University of Humanities and Economics", "Togliatti State University". Students from non-linguistic faculties took part in the experiment, of which experimental and control groups were formed (362 people in total).

The study was carried out in the period from 2016 to 2019 in three stages.

The first stage included the study and analysis of psychological, pedagogical, program and methodological literature, legal acts and the state of the problem in existing practice.

At this stage, the problem, hypothesis was formulated, the purpose of the study was determined; a program of experimental work has been developed; a model of a foreign language teaching system was designed to promote the development of professional competence of students of non-linguistic universities.

The second stage is the conduct of experimental work, combined with the analysis and comprehension of the experience of professional education; refinement and testing of the hypothesis of the study.

The third stage involved the analysis, evaluation and generalization of the results of an experimental verification of the designed system of teaching a foreign language, contributing to the development of professional competence of students of non-language universities; formulation of the main conclusions; literary work.

The generalization of the results of experimental training made it possible to draw theoretical and practical conclusions, to formulate provisions on the significance of the study.

The theoretical significance of the study is that in the work:

- The potential opportunities of a foreign language in the development of professional competence of students of non-linguistic universities have been identified;
- The conceptual foundations of designing a system of teaching a foreign language, aimed at developing the professional competence of students of a non-linguistic university, are defined
- the model of a system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities was developed;
- the pedagogical conditions for the effectiveness of professionally directed teaching of a foreign language to students at a non-linguistic university are defined: the structure of the course includes two areas (general course and professionally oriented);
- the educational process is built in the form of a technological square, in which all four types of speech activity are involved (listening, speaking, reading and writing), embodied in the classes in four aspects of educational and cognitive activity (cognitive, developing, educational, educational);
forms and methods are aimed at providing foreign-language professional communication. The theoretical foundations of the formation and development of professional competence of specialists in the process of teaching a foreign language are clarified.

The practical significance of the study is:

- the development of experimental curricula, special texts of a professional orientation, diagnostic materials and programs to determine the general level of students' training in a foreign language in the field of upcoming professional activity;
- the development of guidelines for the development of professional competence of students of non-linguistic universities in the process of teaching a foreign language, which can be used by teachers.

Testing and implementation of research results.

The results of the study were reported and discussed at meetings of the departments of foreign languages of the above universities. Experimental curricula, special texts, diagnostic materials, and methodological recommendations are used by foreign language teachers of Russian non-linguistic universities.

### 2.3. Analysis of the effectiveness of experiential learning

1. Simulation of the system of learning a foreign language as the factor of development of professional competence of students of non-linguistic universities involves the development of components of the pedagogical process: objectives, contents, methods, forms and means of education.

The purpose of designing the system of learning a foreign language, promoting the development of professional competence of students of non-linguistic universities, is the leading structural component and depends on many conditions and factors identified in the study: the social order of society, personal needs and interests of students, the specificity and the level of perceived training characteristics of the discipline "Foreign language". The purpose is the communication expert in a foreign language, mastering all kinds of speech activity, aimed at solving professional tasks.

2. The structure and content of foreign language teaching of students of non-linguistic universities as an integral part of professional competence defined by the types of activities and qualities of the technician specified by the society and focused on self-development. The basis for the development of such content was the model of a future specialist with the skills of professional foreign language communication, which reflects the expected result of the system of learning a foreign language, ensuring the development of professional competence of students of non-linguistic universities, who are to work in various fields.

3. In the selection of training content takes into account all the factors of natural speech communication: the sphere of professional communication; typical situations that arise in the process of professional foreign language communication; the motives and communicative intentions. When choosing spheres and situations of communication were studied in a real voice needs of specialists of the required profile.

Professional communication sphere was the leading and fundamental to the determination of professionally directed foreign language learning, promoting the development of professional competence of students of non-linguistic University. Within the professional sphere of communication stood out integrative components, showing the relationship and interdependence of the content of education and training. Professional orientation of the learning content was realized through the specific selection of linguistic material, allowing forming linguistic and professional competence.
4. Simulation of the system of learning a foreign language as the factor of development of professional competence of students of non-linguistic universities is carried out at all levels. The developed system is completed by form of organization of cognitive activity of students on mastering a foreign language and managing this activity. It also determines the choice of optimal methods, forms and means of education, to which we refer: deliberately benchmarking; programmed instruction and problem-based learning; simulation of typical situations of professional communication.

The most effective forms of language learning are role-playing and business games, as in order to obtain the status of professional knowledge, information must be assimilated by the student in the context of his own practical action and deed, the action is not purely academic, as close to subject-technological and socio-cultural situations of the upcoming professional activities.

5. The insufficient number of hours allotted to study a foreign language in non-linguistic universities has necessitated the use of various forms of independent work, both in the process of training and in extracurricular time. Types of independent work were as follows: abstracting foreign literature, meetings with native speakers, trips abroad, scientific circles, scientific and practical conferences, and browsing the Internet. All this contributed to an increase in the capacity of educational material, an increase in motivation to learn a foreign language.

6. Differentiation of educational activities of students in the process of teaching a foreign language at a non-linguistic university, organization of independent work are necessary, but insufficient conditions for the development of professional competence of a future specialist. And only a personality-oriented approach to the development and implementation of individual educational routes contributes to the maximum satisfaction of students' professional expectations, the effectiveness of their educational activities and is the basis for the development of a new research model.

An experimental verification of the system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities has proved its overall effectiveness and confirmed the hypothesis put forward.

3. Results

The results of the study were introduced into the practice of teaching foreign languages to students of non-linguistic universities of Russia for the development of professional competence ("Russian State Social University", "Moscow State University of Humanities and Economics", "Togliatti State University"). Based on the results of the work, theoretical and practical results were substantiated and formulated.

3.1. The theoretical results

In the modern Russian society there is a complex and contradictory process of change of value orientations of young people, increases the prestige of higher education that ensures the development of professional competence, allows us to be competitive in a market economy, which necessitates changes in the content and methods of training as a professional.

However, the current nature of the training of students at the University are not fully helping to ensure they have made professional choices, preventing their inclusion in a creative search for the development of the profession in the international arena. There is a need to organize educational process so that to lay the elements of future activities in the teaching discipline, promoting students on the level of proficiency in accordance with international standards, contributing to the development of their professional competence, professional adaptation in the context of international labour market.
Improvement of professional training of students in universities is considered in line with the professionally directed learning a foreign language as a condition for the development of their professional competence.

Professional competence appears to us as a set of professional knowledge, practical skills and professionally significant qualities of personality, providing successful activity of a specialist in the professional sphere with the use of a foreign language.

Development of professional competence of University students has been a gradual introduction to the profession by transferring to the educational process the most significant aspects of convergence in the structure of the education structure of professional activities on the basis of the unity of the personality and activity.

Changes and even adjustments made to the goals of higher education can complicate the activities of the teacher: the search for ways to design the content of the discipline "Foreign Language" with a reference to the final result of its mastery; determination of optimal forms and methods of training adequate to the structure of professional activity; adaptation of the results of training at the stage of inclusion in professional activities.

We went from understanding the learning outcomes as the professional competence of the personality of the future specialist, which implies the unity of theoretical and practical readiness to solve professional problems. At the same time, it was impossible not to take into account the fact that the process of professional expression in the dialogue of cultures requires knowledge of a foreign language, an intermediary language for professionally oriented communication.

3.2. Practical results

Thus, realizing the need to make changes in the educational process, we turned to the model of a foreign language teaching system as a factor in the development of professional competence of students of non-linguistic universities.

The logic of modeling the learning process was as follows:

- the professional environment was imitated through the selection of the content of training with a professional component in the academic discipline "Foreign Language";
- forms, methods and means of teaching a foreign language were selected that contribute to the development of professional competence of students of a non-linguistic university;
- the individual educational routes of students were designed based on their educational experience, opportunities, with a focus on solving their educational problems. The design of individual educational routes allowed us to partially implement a differentiated approach in teaching foreign languages to specialists of various profiles.

The professional orientation of the discipline "Foreign Language" consisted in the context of its teaching, which required the development of foreign texts (special texts) taking into account the specifics of the future professional activities of students, the use of active forms of training. Active forms of conducting training sessions included: solving situational problems, conducting role-playing, business games, and more.

Developed a system of learning a foreign language as a factor of development of professional competence of students of non-linguistic universities, passed a full cycle of experimental verification (2016-2017 school year is the first year 2017-2018 academic year second academic year 2018-2019 academic year - the third year). The sample for the study consisted of the students of nonlinguistic departments of the universities (a total of 362 persons), of which were formed control and experimental groups.
A general assessment of the developed system involved a comparative analysis and generalization of the results.

An experimental check designed on the basis of theoretical provisions and assumptions determined during the study, a foreign language teaching system that ensures the development of professional competence of students of non-linguistic universities, has proved its effectiveness, as can be seen from table 1, where the experimental groups are designated as EG and the control groups as CG.

### Table 1

Indicators of the development of professional competence of students of non-linguistic universities after a generalizing experiment

<table>
<thead>
<tr>
<th>The development of professional competency components, %</th>
<th>Final exam / subject knowledge, %</th>
<th>Final exam / skills of foreign professional communication, %</th>
<th>Final exam / foreign language skills, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>motivation for choosing a profession</td>
<td>EG 59</td>
<td>CG 29,2</td>
<td>EG 71,5</td>
</tr>
</tbody>
</table>

From table 1 we see that by the end of the second year of study there were significant changes in the motivational sphere of students and reached a value of 59%, in the control groups this figure was 29.2%.

The implementation of the developed system contributed to positive changes in the nature of attitudes toward the future profession: 71.5% of second-year students of the experimental groups expressed a positive attitude towards the future profession, while in the control groups this number was 61.1%. It was found that 95% of students in the experimental groups rated the content of the proposed foreign language training course as relevant to their personal interests and professional needs; 95% in the control groups, this result was 75%.

Positive changes occurred in the self-assessment of students’ ability to master a foreign language (a positive change for second-year students of the experimental groups was 24.2% of the sample; in the control groups, 16.2%).

The final exam showed that 82.6% of students in the experimental groups as a result have the skills of adequate foreign language professional communication and speech behavior that is appropriate to the situations and tasks of communication, in the control groups this result was 69%.

The results of the experimental verification confirmed that the developed system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities:

- forms a conscious attitude to the educational process (the index of satisfaction with studies in the second year at universities is 0.9);
- promotes the installation of a foreign language for professional purposes (satisfaction index 0.8) and positive changes in the nature of students' attitudes towards future professions;
- affects the self-esteem of abilities, forming professionally significant skills and abilities and influencing motivation, thanks to the awareness of new opportunities that professional competence gives in the process of teaching a foreign language;
ensures the success of foreign language professional communication in all types of speech activity and its relevance to senior students.

4. Conclusions

The study of the problem of developing professional competence in the process of teaching a foreign language to students of non-linguistic universities indicates a low level of language training of future specialists of various profiles, which does not meet the modern requirements of society and the international labor market. The main conclusions of the study allow us to solve the indicated problem.

4.1. Theoretical conclusions

The study proved the need to develop and design such a system of teaching a foreign language to students of non-linguistic universities, which would be aimed at developing professional competence; solved the tasks determined by the social order of society; increased motivation to learn a foreign language; contributed to enhancing the functional significance of this discipline; determined the role of a foreign language in upcoming professional activities.

The theoretical basis of the study was made up of such categories and concepts as "competence", "professional competence", "communicative competence", "professional orientation", "system".

The analysis of scientific and pedagogical, educational and methodical literature, the study of the qualification characteristics of specialists of various profiles made it possible to distinguish components such as professionally educational (informative) in the structure of professional competence of future specialists; professionally active and professionally personal; to isolate from them and justify those competencies whose development implicitly ensures learning a foreign language.

The basis of the concept of modeling a system of teaching a foreign language as a factor in the development of professional competence of students of non-linguistic universities was: the principle of professional orientation; systemic and communicative approaches; pedagogical design ideas.

Using the method of pedagogical design allowed us to develop a model of a foreign language teaching system as a factor in the development of professional competence of students of non-linguistic universities, which we consider as an integrated system, all of whose components are interconnected and interdependent. The main system-forming component of the designed system is the principle of professional orientation, which determined the goals, structure, content, methods, forms and means of teaching a foreign language, ensuring the development of professional competence of students of non-linguistic universities, and made it possible to integrate and synchronize the stages of development of professional competence.

4.2. Practical conclusions

The essence of the developed system was a sequential transition from the analysis of the socio-economic order of society, personal interests and needs of students to the design of the pedagogical process of generating the required knowledge and skills in the field of a foreign language as an integral part of professional competence.

As a result of the functioning of the system, the company receives a professionally competent, competitive specialist, possessing the practical skills of using a foreign language for the further self-development of personal qualities, professional development and career growth.

The structure and content of teaching a foreign language, as an integral part of professional competence, is determined by the types of activities and qualities of a specialist, set by society and focused on personal self-development. The basis for the development of such content was the model of a future specialist with the skills
of foreign language professional communication, reflecting the planned result of a foreign language teaching system, ensuring the development of professional competence of students of non-language universities who have to work in various fields.

In order to obtain the status of professional knowledge, information must be assimilated by the student in the context of his own practical action and act, an action not purely academic, but close to the subject-technological situations of the upcoming professional activity. Therefore, the most effective method of teaching a foreign language was the modeling of typical situations of professional communication, and of the active forms of training, preference was given to role-playing and business games.

Differentiation of educational activities of students in the process of teaching a foreign language at the university, organization of independent work, both in the process of training and extracurricular hours, are necessary but not sufficient conditions for the development of professional competence of a future specialist. And only an individual educational route contributes to the maximum satisfaction of professional expectations of students and the effectiveness of educational activities.

Experimental verification of the developed and substantiated system of teaching a foreign language has proved its effectiveness as a factor in the development of professional competence of students of non-linguistic universities.

Our study does not exhaust all issues related to the development of professional competence of students of non-linguistic universities. Further development of the complex of integral criteria that determine the effectiveness of the system is needed. The unresolved problem of the continuity of the development of professional competence of students during the entire period of study at the university. Due to the insufficient number of study hours provided for by the curriculum for the subject “Foreign Language” in non-linguistic universities, significant differences in the basic training of students in a foreign language, in their requests, interests, and social expectations of further development, require the problem of individualization of teaching a foreign language in the general system vocational education. With the study of these problems, we connect the prospects of our future research work.

**Bibliographic references**


