# Foreign Language Teaching in Higher Education Institutions Optimization in the Education Informatization Sustainable Development Context

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Abstract: The study goal is to determine the features and scientific and theoretical aspects of the university unified

informational and educational environment coordination in the preparation and teaching of students in a foreign language while exerting pedagogical influence on the individual, taking into account the modeling of foreign language competence. The article analyzes the university informational and learning environment role, that is based on the mechanisms of students internal activity with the information and methodological dominant of educational activity, which allows them to master a foreign language in a natural language environment based on information technologies. This is possible on the basis of appropriate language information and educational integration of teaching methods and techniques associated with interactive learning platforms and the university information resources. The article also identifies a new information content type that affects the foreign language teaching optimization. The scientific novelty of the research lies in the modeling of the university information and educational environment in the new education paradigm justification, in the center of which there is individual information literacy. As a result, it is proved that the theory and methodology of teaching a foreign language depends on the communication organization effectiveness and information environments that increase the students socio-cultural competence and

effectiveness and information environments that increase the students socio-cultural competence and language literacy.

#### 1 INTRODUCTION

The relevance of the research topic is determined by the educational process general patterns identification in the system of objective criteria aimed at the students writing and speech skills development in the process of mastering a foreign language. A characteristic feature of the introduction of new pedagogical technologies implemented in the information environment successful integration conditions is their ability to optimize the learning process through online editing and verification of students written works. Certainly, the information space allows you to provide timely communication between a teacher and students, which contributes to

the reflection development, the possibility of commenting and making amendments to the work. It should be noted that the use of distance learning based on information and telecommunications resources in a foreign language increases the teaching effectiveness of monitoring the students knowledge and skills in the context of language culture development, linguistic and cultural and lexical skills, improving foreign language communicative competence, self-learning abilities in an electronic two-level format. Therefore, in our opinion, divergent control should correspond to the main indicators of the individual trajectory of students self-learning in terms of increasing the degree of their cognitive activity in mastering foreign language speech culture.

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To achieve this research goal, it is necessary to solve the following tasks. First, to determine the necessary methods and techniques for optimizing language education in the context of teaching informatization and digitalization. Second, to identify areas for optimizing the process of teaching a foreign language based on the information and educational environment of the university in the search for the effective development of educational information interaction between teachers and students. Third, to justify the theoretical and information pragmatic aspects functions of technologies usage in teaching a foreign language at a university, taking into account the methodology and models, computer-mediated distance learning educational communication.

To understand the reasonability ideas of using an information system for teaching a foreign language at a university, the article uses the following research methods: the axiomatic method, which was used to consider the statements of our theory through axioms, and the structural analysis method.

The theoretical basis of the study was the publications of Russian authors R.Z. Amiralieva, I.Y. Mishota, I.V. Kharlamenco (Amiralieva, 2013; Mishota, 2013; Kharlamenco, 2020), which consider models of the information technologies use for the students language culture development in the context of trends under the conditions of the higher education system modernization.

The practical significance of the study lies in the fact that the directions of optimizing foreign language teaching in higher education in the education informatization context can be used in pedagogical activities to improve the educational process of foreign language training in higher education. It can also contribute to the language education methodology development.

## 2 METHODS AND TECHNIQUES FOR OPTIMIZING LANGUAGE EDUCATION IN THE CONTEXT OF HIGHER EDUCATION INFORMATIZATION AND DIGITALIZATION

Individualization and differentiation of knowledge control and evaluation of students results in learning a foreign language is actively used today through the use of test simulators, listening to audio and video recordings, training grammatical and lexical structures in the educational information computer visualization conditions, which is associated with the modernization of the information content of education at the university. The educational trajectory allows to use information and methodological complexes, network electronic technologies, distance learning technologies are providing that the training is individualized, the methods and foreign language material optimization speed, that affect the information perception features, are improved and optimized.

So, S.V. Ivanova, A.V. Malova, while analyzing the methods and techniques of optimizing language education, came to the conclusion that the problem of finding new methods and techniques is related to the teaching foreign languages motivation. According to the authors, "smart education" meets the challenges of an unstable environment, which is characterized by the use of electronic, educational Internet content, based on the use of online resources, web resources that allow you to include the materials of the network in the content of classes with students. The use of audio texts and videos with different levels of complexity is determined by working in pairs, the ability to ask and answer questions about the content, the dialogic speech development and communication skills formation (Ivanova Malova, 2019).

G.V. Alipatov, G.V. Cherkasov notes that the training model allows you to develop the connection between knowledge and skills, based on interactive exercises in the process of learning a foreign language. Students, performing work on the simulator, carefully approach the presentation material analysis, while working with text, image and sound. It allows them to optimize the knowledge assimilation and increase foreign language literacy (Alipatov and Cherkasov, 2019).

Working with a text of a linguistic and cultural nature allows to change the qualitative language and speech material stylistically when using a model for measuring the linguistic similarity of the original and translation. Semantic and structural analysis of foreign language texts in the education informatization context gets a new aspect, i.e. the translation of literary texts is carried out in a system of creative exercises, diverse in form and content, often in a game form. Using creative tasks, the university teacher forms a speech creative or semicreative character of training based on improving the written and oral speech skills.

The use of the Internet allows you to create a genuine language environment that promotes

effective familiarization of students with new language material. In addition to the work on the formation of reading and listening skills, it is possible to use sites to expand the vocabulary, get acquainted with new grammatical rules, and read e-books. A wide range of online lessons, articles, topics, tests, video lessons, English via skype, conversational practices and simulators, complex multi-level exercises, completion spreadsheets phraseological units, working with visual images, visual and sound series, drawing up creative projects in a foreign language and performing tasks using an electronic template, working with multimedia country-specific material, preparing messages, working with electronic dictionaries and glossaries, working with translations using electronic schemes form different levels of language proficiency (Bukina, 2020) exists. The website Learn English Today (http://learn-english-today.com/) has an affordable and simple service that provides grammatical rules, a huge number of exercises, videos, multivariate exercises containing a rich associative video sequence, which contributes to improving the quality of foreign language acquisition.

With the information technologies introduction, conferences introduction, students are immersed in a natural language environment, which provides an opportunity to vary the ways of presenting information. A variety of methods, the use of information and search activities skills and abilities, joint creativity with a teacher allows them to use learning tools based on virtual reality. Electronic libraries with remote access, electronic lectures, virtual lectures conducted in real time, educational books in electronic form are effective. It joins educational and methodological interactive complexes into a single educational information space. Didactic audio and video educational multimedia-operational materials. complex environments create an entry into the integrated information systems of teaching a foreign language in the presence of multi-purpose tasks. Also, online resources allow you to study theoretical material, improve knowledge control, and improve the translation from a foreign language efficiency.

Smartphones, tablets, Web tools, cloud services Google, Office 365 are determined by the educational work of the information and university educational environment in terms of optimizing the didactic possibilities of teaching a foreign language. The forms of organization of educational activities from these positions are determined by the use of digital technologies, digital tools that affect reading, oral speech, oral storytelling, students attention

concentration and memory while studying foreign language lexical units. The laptop allows students to record a larger volume of educational materials, developing the technological aspects of learning foreign languages in the context of the personal language practice development.

## 3 DIRECTIONS FOR OPTIMIZING THE PROCESS OF TEACHING A FOREIGN LANGUAGE BASED ON THE UNIVERSITY INFORMATION AND EDUCATIONAL ENVIRONMENT

The main directions of optimizing the teaching a foreign language process on the university information and educational environment basis include the differentiation of various education levels. Computer tools contribute to the various language forms of communication formation in the management of students speech interaction in the individual functional system of speech activity. Hence, we can conclude that the pedagogical, didactic and functional potential of the university informational and educational environment allows us to create platforms that ensure the educational material systematization, the content modularity organization, and the university operation modes openness in the conditions of the information culture of future specialists improvement.

So, A. V. Ballastov, E. Y. Sokolova identified that the multidimensional nature of the educational process in the university is due to its electronic information and educational environment, which is based on the interactivity principle. According to the authors, the students personality socialization, their individual-personal and professional development is determined by their readiness for innovative and experimental research activities. Therefore, when teaching a foreign language, it is necessary that a foreign language communication environment is created at the university with the help of multimedia tools that allow to realize the perception of foreign language speech with the possibility of modeling real communication situations with other nations representatives (Ballastov and Sokolova, 2017).

In our opinion, the main directions in optimizing the process of teaching a foreign language based on the information and the university educational environment are:

- 1. The ability to constantly be in the language environment with the help of Internet technologies, increasing the ability to work with electronic dictionaries and other electronic resources.
- 2. The didactic and methodological potential of a foreign language systematization in the conditions of working with authentic materials, ensuring the effective and mobile interaction between students and a teacher while increasing their independence.
- 3. The opportunity to gain additional knowledge and deeper mastery of the language on the basis of interactive simulators that allow to create an authentic virtual language environment.

I. V. Kharlamenko argues that the methodology of teaching a foreign language in higher education institutions should be based on a competence approach associated with the latest technologies rapid development and the global information environment formation. According to the researcher, the modern system of higher education in Russia is represented by various digital technologies that allow to identify the features of teaching a foreign language, the opportunities for students to choose their own vocabulary on the basis of multi-component tasks containing the thematic organization of language learning by blocks, wiki glossaries, web projects that allow them to access authentic sources during the material preparation (Kharlamenko, 2020).

Foreign language training of university students on the basis of communicative, linguistic, socio-cultural knowledge, skills and abilities is aimed at mastering the scientific culture of thinking on the basis of optimizing the organizational and effective factors of the foreign language education methodological system. At the present stage of society development, the education professionalization is a complete dynamic modeled system that should provide motivation for students to learn a foreign language.

According to E.P. Zvyagintseva, N.I. Sokolova, the goal definition of improving the foreign language training for students should correspond to the creation of an optimal educational environment in the university that implements the techniques of students personal growth, as well as the methodological system improvement that corresponds to the local and international levels of students foreign language competence formation (Zvyagintseva, 2014).

So, the use of language teaching active and interactive methods based on the information and educational environment of the university is based on the use of the latest technical means and technologies that are focused on the students complex foreign language training. The expressed interest in the

university information and educational environment organization during teaching a foreign language is confirmed by the fact that the technological-procedural and socio-subjective aspects of its functioning are associated with the reflexive function. Students and teachers very often implement general cultural and professional competencies that allow them to realize and evaluate the results of their activities in the university pedagogical process. It is impossible without reflection.

Various representatives of scientific research on the organization of foreign language learning at the university emphasize that the need for a conscious choice and the students educational trajectory adjustment is determined by the cultural and program-methodological complexes of information collections of foreign language teachers. In particular, the focus is on the set of information and educational resources that allow to manage the process of preparing students and the teachers' author's creative tasks development adapted to the university specialization.

So, E.Y. Kamysheva came to the conclusion that innovative educational technologies in teaching a foreign language imply the presence of a certain innovative infrastructure, knowledge delivery and management of the educational course, access to the library of audiovisual and computer equipment. According to the author, this allows us to identify the functions of the university information and educational environment, related to the individual socialization and inculturation. Hence, the formation of scientific and theoretical knowledge is determined by the students professional values and value orientations, their interests and motives for learning language (Kamysheva, 2017).

4 THEORETICAL AND
PRAGMATIC ASPECTS
FUNCTIONS OF THE
INFORMATION
TECHNOLOGIES
APPLICATION IN TEACHING
A FOREIGN LANGUAGE AT A
UNIVERSITY

The following theoretical and pragmatic aspects functions of the information technologies application in teaching a foreign language at a university are distinguished:

- Socialization function;
- The function of adaptation to new sociocultural changes in society;
- Reflexive function;
- Information function related to the students information literacy development.

For this purpose, the Kazan State Institute of Culture implemented the Program "Integration of Cultures", that was approbated in "the Center for Cultures Integration", created at the Department of Intercultural Communication and Linguistics in Kazan State Institute of Culture. The Center aims to create a socio-cultural and information-educational environment aimed at students creative self-development when learning a foreign language. The main activities of the center are:

- Improving the students educational and cultural levels:
- The creative abilities development;
- Improving the quality of foreign language proficiency;
- Stimulating intellectual and linguistic activity;
- Expanding the cultural outlook and aesthetic taste;
- The socio-cultural competencies development;
- Application of language knowledge, skills and abilities in the context of communication with representatives of other cultures (Novgorodova, 2018).

The subject-social component of the university information environment is associated with the support of an expanded nomenclature of various types of foreign language communication, which provides preparation for communication with representatives of various linguistic societies. Didactic and methodological aspects of the electronic educational environment use in two universities are based on the improvement and intensification of the teaching foreign languages process at the university, provided that the training is environment-oriented and the optimal organization of training takes into account students' needs. The use of the new technological training basis allows to implement a comprehensive professional personnel training on the basis of increasing the students foreign language communicative competence levels, information literacy and optimization of language culture during video conferences and competitions that form linguistic and linguistic-cultural preparation.

M.V. Artamonova, L.V. Pavlova note that the multiplatform nature of the innovative educational technologies integration is associated with step-by-step control and assistance in learning a foreign language. Today, according to the authors, a

"language portfolio", that creates the conditions for reflecting on the current academic work is relevant. The university information educational environment use is also associated, in their opinion, with productive research work, controlled language material development and skills of educational and cognitive activity of students online consolidation (Artamonova and Pavlova, 2019).

#### 5 CONCLUSIONS

So, we can conclude that the optimization of the process of teaching foreign languages in higher education in the context of education informatization is associated with an increase in the quality of students information literacy. It leaves an imprint on the entire system of teaching a foreign language. Reflection and independence in the context of digital learning is formed on the basis of developing the language culture of the individual integrative methods use, understanding the semantic and lexical meaning of the language, the country of the studied language culture, as well as improving knowledge based on the skills of using digital methodological resources, online lectures, video presentations and other content. Also, the university information educational environment, as a means of intensifying the computer tools usage, allows the aspects differentiated development in students' language competence development in the presence systematic development and understanding forecasting of structured dialogues based on the interaction between the training participants. This develops critical thinking, the ability to use primary sources, increases communication skills, and forms the ability to communicate cross-culturally in a foreign language. Our task is to develop the value component of the information and educational environment in two universities, their fruitful cooperation aimed at the formation and development of students language skills, reasoned discussion in a foreign language, while using the correct terminology and grammar. All this is implemented in the program "Integration of Cultures", which was implemented at the Department of Intercultural Communication and Linguistics of the Kazan State Institute of Culture.

We see the prospects for further problem research in a more detailed study of the multimedia use as a means of improving students foreign language literacy, taking into account an integrated approach in identifying the values of the foreign cultural environment.

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