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EFFECT OF PEDAGOGICAL SUPPORT ON THE DEVELOPMENT OF LINGUOCULTURAL COMPETENCE AMONG STUDENTS IN MULTI-ETHNIC GROUPS

EFFECTO DEL APOYO PEDAGÓGICO EN EL DESARROLLO DE LA COMPETENCIA LINGÜÍSTICA DE LOS ALUMNOS DE GRUPOS MULTIÉTNICOS

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Suggested citation (APA, seventh ed.)

Shestitko, I., Zhuzeyev, S., Polyakova, G., Kozachek, A., Galizina, E., y Panova, E. (2024). Effect of pedagogical support on the development of linguocultural competence among students in multi-ethnic groups. *Revista Conrado*, 20(97), 506-512.

ABSTRACT

The article aims to analyze the specifics of the technology of building students' linguocultural competence through studying the process of teaching foreign languages in a multi-ethnic space. The methods of theoretical generalization, structural-logical analysis, and synthesis are used to achieve the set research goal. The paper identifies the components, criteria, and indicators of linguocultural competence in a multi-ethnic space, the pedagogical conditions of developing linguocultural competence in a multi-ethnic space, and the technologies of their realization. The study concludes that the pedagogical conditions for the development of linguocultural competence in a multi-ethnic space can be achieved using certain pedagogical support in the educational process with carefully

developed methodological and thematic content. In its totality, this represents the concept of the technology of linguocultural competence development and the concept of modern multicultural education.

Keywords:

Linguocultural competence. Foreign language teaching. Pedagogical technologies. Multi-ethnic learning environment.

RESUMEN

El artículo tiene como objetivo analizar las características específicas de la tecnología de la construcción de la competencia lingüística de los estudiantes a través del estudio del proceso de enseñanza de lenguas extranjeras

en un espacio multiétnico. Se utilizan los métodos de generalización teórica, análisis estructural-lógico y síntesis para alcanzar el objetivo de investigación fijado. El trabajo identifica los componentes, criterios e indicadores de la competencia lingüística en un espacio multiétnico, las condiciones pedagógicas del desarrollo de la competencia lingüística en un espacio multiétnico y las tecnologías de su realización. El estudio concluye que las condiciones pedagógicas para el desarrollo de la competencia lingüística en un espacio multiétnico pueden lograrse utilizando cierto apoyo pedagógico en el proceso educativo con un contenido metodológico y temático cuidadosamente desarrollado. En su totalidad, esto representa el concepto de la tecnología del desarrollo de la competencia lingüística y cultural y el concepto de la educación multicultural moderna.

Palabras clave:

Competencia lingüística y cultural. Enseñanza de lenguas extranjeras. Tecnologías pedagógicas. Entorno de aprendizaje multiétnico.

INTRODUCTION

Today, the social demand for specialists not only possessing professional knowledge in their field but also having developed soft skills, particularly in effective intercultural communicative activity, necessitates new approaches to enriching the content of professional training. The priority task of language education has become the provision of quality professional communicative training of specialists. The achievement of this objective depends on the development of linguocultural competence (LCC) (Suvorova, 2014). To be successful in professional practice, a specialist in any field needs to master the language and professional vocabulary (Aleksandrova et al., 2023), actively use the foreign language (FL) (Pivneva et al., 2023), and be ready to cooperate with representatives of other cultures.

Recently, the culturological aspect of FL learning has gained special importance and urgency (Zhang et al., 2020). If earlier linguistic competence was developed through a methodology that relied mainly on the structural-semantic approach, now the preference is given to communicative competence, for which mastering the linguistic code common to communicators is not enough.

Current linguistic research adheres to the view that the efficiency of language communication depends primarily on cultural factors that significantly influence not only the elements of the language code (e.g., the semantics of individual words or word combinations), but also the communication process itself and its components, principles

and rules of communication, and communicative strategies and tactics (Akhmetshin et al., 2021).

The problem of co-learning languages and cultures is at the center of attention of both scientists and practicing teachers due to the large number of studies in the field of intercultural communication and the dialog of cultures. The basic principles of co-learning of language and culture are addressed in the works investigating the expression of culture in language and the interrelation of language and culture (Miroshnikova, 2017). Despite the undeniable achievements in illuminating cultural and linguistic aspects in pedagogical theory, there is a need to specify how the relationship between language and culture is utilized in the development of LCC in vocational training.

The content of LCC is interpreted by most scholars as the ability and readiness for adequate mutual understanding with representatives of another linguocultural community based on mastering knowledge about the world that is contained in language units and constitutes the cognitive foundation of communication (Tereshchenko et al., 2018).

According to Gorodetskaia (2009), believes that LCC reflection of linguoculture in the individual's consciousness, namely, the idea of common norms, rules, and traditions of verbal and non-verbal communication within a given socio-ethnic community, which is formed in the process of the individual's appropriation of a part of the array of linguocultural information (texts in the broadest sense) generated by the given linguoculture. The scholar associates LCC with national linguoculture but points out that it can be found in members of various subcultures (social, professional, age, etc.) within the national culture.

Some authors merge LCC with language culture. Language culture expresses the ability of a person to use the functions of language most effectively and implies mastery of the literary norms of language, the ability to select the necessary linguistic means to achieve effective communication, mastery of oral and written genres of texts of different styles, and public speaking and speech communication skills in professional practice. Having an arsenal of language units and means and the ability to use them, the individual becomes more competent in choosing and using linguistic means and improving their language culture, and thus general culture overall (Shafazhinskaya et al., 2023).

According to Dortman (2012), understands LCC as a complex ability to understand various phenomena of culture and language, interconnected with each other and reflected in the consciousness of a certain community of people (ethical, social, gender, professional, age, etc.) or

the consciousness of an individual as an integral mental structure.

In the interpretation of Podgorbunskikh (2012a), LCC is an integral quality of personality that includes knowledge and skills related to the selection, assimilation, processing, transformation, and practical use of information about linguoculture, experience of intercultural communication, and the personal qualities necessary for its successful realization in another linguoculture. In this definition, of importance for us are the communicative properties and personal qualities required to carry out intercultural communication in contact with another linguoculture.

Statsenko & Baskova (2015), insists on the complex communicative and cognitive meaning of LCC. This competence implies command of different types of speech activity in the sociocultural space, the ability to perceive foreign language and foreign culture and to produce one's statements considering the conditions and tasks of tolerant communication. In this definition, we agree with the presence of a personal component, the manifestation of which consists in tolerance towards another culture.

According to Garifova (2013), LCC should encompass foreign language communication skills, deep familiarity with the cultural context and features of the national mentality of the country of the target language, as well as competence in linguodidactics.

A similar opinion is expressed in the work of Urakova et al. (2022), where LCC is defined as one of the most important concepts in intercultural communication; knowledge of the basic elements of culture (national customs, traditions, realities, etc.) of the country of the language of communication; the speaker's ability to discover information about the country in the language and use it to achieve the planned communicative goals; ability to carry out intercultural communication, which implies knowledge of lexical units with a national-cultural (ethnocultural) component of semantics and skills of their adequate use in intercultural communication, as well as the ability to use background knowledge to achieve mutual understanding in mediated and direct intercultural communication.

Kartavaia (2016), also sees LCC as a component of intercultural communication and notes the need for sociocultural knowledge, mastery of the FL (language competence), and communicative skills and psychological abilities for its successful realization.

Vtorushina (2009), interprets LCC as a highly developed ability of an individual to navigate the value and meaning space of language and culture, of which they are a part, including being a carrier of the ethnolinguistic picture of the world and linguistic consciousness, as well as an integral

subject of the cultural and cognitive space of language and an active participant in all types of communication.

Thus, under the LCC of students in multi-ethnic groups we will understand an integral quality of personality that characterizes its deep insight into professional-communicative knowledge, reflects their readiness and ability to mutual understanding and interaction with representatives of another language, knowledge of another language and culture, and personal social experience in solving professional tasks.

In the process of learning, students in multi-ethnic groups not only study the FL but also learn the sociocultural features of their fellow students. The study of the subject considers the sociocultural peculiarities of the modern multicultural world, which implies cultural interaction, adequate mutual understanding, and spiritual enrichment of representatives of different linguocultural communities (Grakhova et al., 2022). Studying a language not only as a means of communication, but also as a means of reflecting the culture, psychology, and mentality of another nationality, students get an opportunity to better learn their language and the culture of their country and to establish relationships with the cultures of different countries.

Considering the above, the present study aims to analyze the specifics of the technology of developing students' linguocultural competence by examining the process of teaching foreign languages in a multi-ethnic space.

MATERIALS AND METHODS

The novelty of the phenomenon under study and the exploratory nature of the goal predetermined the use of a qualitative approach to the study.

At the first stage of the study, we selected scientific sources in the Scopus and Web of Science citation databases using the keywords "linguocultural competence", "foreign language teaching", "pedagogical technologies", and "multi-ethnic learning environment" with the restriction on the date of publication no more than 15 years ago.

At the second stage, based on the analysis of the scientific literature, we attempted to answer the following research questions:

- (1) What is the structure of the LCC of future specialists?
- (2) What are the pedagogical conditions for developing LCC in a multi-ethnic space?
- (3) What methods, techniques, means, and content of educational material can be used for their realization?

To achieve the set research goal, we determined an approximate set of theoretical research methods:

- structural and logical analysis to determine the components, criteria, and indicators of LCC;
- theoretical generalization to establish the pedagogical conditions of LCC development in a multi-ethnic space and the methods, techniques, means, and content of educational material that can be used for their achievement.

Proceeding from the position that the LCC of future specialists is one of the components of the complex pedagogical phenomenon of communicative competence, we have defined the structure of the LCC of future specialists based on structural and logical analysis to further substantiate the technology of developing the LCC of students in multi-ethnic groups. It consists of the information-cognitive, value-motivational, personal, perceptual-interactive, and communicative-behavioral components and their corresponding criteria and indicators (Table 1).

Table 1. Components, criteria, and indicators of LCC.

| Component | Criterion | Indicators |
|--------------------------|---------------|---|
| information-cognitive | cognitive | Synthesis and completeness of knowledge about one's native culture and the culture of another country, history, and traditions; linguistic and cultural literacy, knowledge of intercultural interaction, human relationships, moral norms and prohibitions |
| value-motivational | motivational | striving to master a foreign language and knowledge about the culture of its native speakers; awareness of the need for foreign language communication; future specialist's social attitudes and value orientations to continue improving their LCC |
| perceptual-interactive | activity | ability to use means of forming and formulating one's own opinions directly through the FL, as well as in the process of perception and transfer of information; knowledge of the structure and features of conducting a professional dialog; knowledge of business communication norms; ability to select information necessary for solving practical tasks from different sources |
| communicative-behavioral | communicative | knowledge of the linguistic, paralinguistic, and extra-linguistic means of communication, communicative skills, behavioral flexibility, ability to apply professional knowledge in the context of professional communication with representatives of other cultures |

Source: Preparation of authors

The components outlined in Table 1 are functionally interconnected, are continuously realized and updated, and define the specialist's ability to efficiently solve professional tasks.

The conducted theoretical analysis also allows us to define the pedagogical conditions of LCC development in a multi-ethnic space and the technologies of their realization in the practice of teaching (Table 2).

Table 2. Pedagogical conditions for the development of LLC in a multi-ethnic space and the technologies of their realization.

| Pedagogical conditions | Results of implementation | Methods, techniques, means, and content of educational material |
|---|--|--|
| formation of future specialists' motivation and personal orientation to master LCC | development of the indicators of the value-motivational component | the game method (game situations, role-playing games, educational business games), the project method; linguocultural training |
| focusing the content of linguocultural training on the formation of a positive attitude to future professional activity and mastery of the norms of professional behavior and professionally important qualities and skills | development of the indicators of the communicative-behavioral component | the project method, linguocultural training, the use of linguoculturally-oriented tasks based on professional profiles |
| creation of a linguocultural environment using multimedia technologies as a means of developing LCC | stimulation of information-cognitive and perceptual-communicative components | the use of electronic educational resources, multimedia technologies, and access to the Internet |
| deepening interdisciplinary links in the linguocultural training of future specialists | stimulation of the perceptual-interactive component | coordination of discipline curricula, the project method |

Source: Preparation of authors

The basis for the development of LCC in future specialists in a multi-ethnic space is an integral pedagogical process, the efficiency of which determines the efficiency of the pedagogical system in its entirety.

In accordance with the structure of LCC (Table 1), we identified the criteria of its development (cognitive, motivational, reflexive, activity, communicative), each corresponding to certain indicators of development, which can be used in determining the level of LCC development.

When describing the technology of realization of the pedagogical conditions for the development of LCC in a multi-ethnic space (Table 2), we consider each of them in totality with others and closely analyze the peculiarities of their introduction.

The introduction of the first pedagogical condition relates to the development of indicators under the value-motivational component, namely, motivation for the development of LCC. Since motivation is formed in the learning process and is contingent on its organization, methods, techniques, and the means and content of educational material, the maximum activation of students' cognitive activity should be achieved by enhancing the communicative component of the learning process by creating situations of active interaction, in which students face the need to talk in the FL utilizing the available knowledge, skills, and abilities. This activity not only satisfies students' communicative needs but creates a positive attitude towards the development of foreign language speech activity.

In practical classes of professional FL, the communicative focus of learning is provided using games (game situations, role-playing, educational business games) and the project method. Educational games are known to create conditions for the activation of students' intellectual work, intensify the learning process, and contribute to better learning (Tereshchenko et al., 2018). An educational game can be considered a transition stage between the learning process and real life. Thus, students actively participate in dictionary games at the training and middle levels, when words on general topics are discussed. Then, at the advanced level of language proficiency, terms used in the professional sphere are covered.

The principles of intensive learning presuppose the use of role-play and business games at all stages of learning. At the first stage, it is most important to study the language of everyday social and sociocultural communication as a prerequisite for further effective mastery of professional communication. Already at this stage, it is expedient to practice the skills of proper speech behavior in different everyday communicative situations. Although these situations can be classified as non-professional communication, a great number of professionally coded linguistic units can be used already at this stage.

When students study an FL in a professional direction, it is advisable to use business games. The main feature of business games is the mandatory presence of a

professionally-oriented problem when students must actively use the FL to solve it. At this stage, future specialists strengthen their skills and abilities, particularly the ability to think creatively, use their knowledge and experience gained in the study of other disciplines, and make decisions independently.

An important stage of role-play is analysis when the teacher and students hold a group discussion of the plausibility, credibility, and appropriateness of behavior and the methods of communication applied accordingly.

Another method that stimulates motivation for professional training is the project method, in which students independently plan, create, and defend their project, i.e., actively participate in a communicative activity (Zotova et al., 2022). While working on the project, students independently (individually or in small groups), without the teacher's help or with minimal coordination, identify a problem, put forward various hypotheses for its resolution, and propose possible solutions.

With the project method, students demonstrate higher engagement in the learning process, greater motivation and cognitive interest, improved confidence and self-esteem, and better trust in the teacher and peers in multi-ethnic groups. The use of the project method in developing LCC is a clear and justified integration of the value-motivational, perceptive-interactive, and communicative-behavioral components of LCC.

The formation of motivation to master LCC can also be ensured by stimulating students' search activity in language material. To this end, it is possible to use linguocultural training, including various tasks on general cultural, linguistic, and professional language topics. Dortman (2012), defines educational linguocultural training as a teaching method aimed at the educational goal of developing intercultural competence through coordinated exercises aimed at preparing students for situations of intercultural interaction. The original system of tasks in linguocultural training should focus on the acquisition of knowledge in the field of cross-cultural communication, the development of skills and abilities in the practical mastery of foreign language communication for intercultural business communication, and the development of special competencies of the future specialist in the field of business communication. During the linguocultural training, students are offered a wide range of tasks asking them to solve and discuss issues of linguistic, cultural, or professional nature individually, in pairs, or small groups, as well as conduct interviews, present the result of group work in the plenary, discuss them, etc.

The development and implementation of the linguocultural training also contribute to the introduction of the second

pedagogical condition – the focus of the content of linguocultural training on mastering the norms of professional conduct and developing professionally important qualities and skills by stimulating the communicative-behavioral component.

A prominent place among the means of stimulating the development of the communicative-behavioral component is occupied by the use of linguoculturally-oriented tasks based on professional types of persons. These types are defined by Podgorbunskikh (2012b), as a personified image of the profession itself, a generalized image of a typical professional associated with the prestige of the profession, ideas about the typical personality traits of the professional, and the emotional and value aspects of the profession and professional practice.

As a form of linguocultural search, students can be offered to learn about professional types and their characteristics in the FL and define the key traits inherent in each of them, find famous persons reminding of each type in literature and history, and create photo or video reports. The results of this search can be presented in presentations with discussion in the native and foreign languages.

The third pedagogical condition, the creation of a linguocultural environment using multimedia technology as a tool for the development of LCC, is introduced by stimulating the information-cognitive and perceptive-communicative components of LCC.

The linguocultural environment has its features in every individual university and possesses great potential for students' communicative development. Academic linguoculture serves as a means of development and improvement of students' skills and abilities in academic-scientific, academic-professional, and scientific-professional communication (Goverdovskaya et al., 2021). This component also performs the functions of integrating students in multi-ethnic groups into the professional community: in communication with teachers of specialized disciplines and with specialists during industrial practice, students learn moral and ethical norms, the rules of professional communicative interaction, etc.

In our opinion, the linguocultural environment of the university becomes an effective condition for the development of LCC if it is created based on electronic educational resources, enables synchronous and asynchronous communication of participants of the educational process, offers opportunities for testing and administration, and is provided with all the modern multimedia technologies and Internet access. The operation of innovative information technologies makes the learning process more technological and efficient.

The fourth pedagogical condition, the deepening of interdisciplinary ties in linguocultural training, generally assumes practical implementation of the interdisciplinary approach to vocational training. The basis of realizing this condition is the stimulation of the perceptive-interactive component of LCC.

Interdisciplinary ties rely on a synthesis of the goals of individual academic disciplines with a single integrated goal of developing LCC and are introduced using the coordination of disciplines' curricula by the principle of continuity of learning.

Cooperation with teachers of humanitarian and professional disciplines and the analysis and coordination of the operational programs of these disciplines allows developing and introducing a special course focused directly on preparing future specialists for intercultural business communication and interaction with foreign colleagues. Such a course will allow students to learn about the specifics of communicative behavior in a multicultural environment and expand their knowledge about the cultural diversity of the modern world, as well as develop the qualities, skills, and abilities necessary for intercultural communication. This will ultimately help future professionals avoid language and cultural barriers and show understanding, empathy, tact, and tolerance to cultural differences when performing their professional duties.

CONCLUSIONS

Proceeding from the definition of the essence of the LCC of students in multi-ethnic groups, the components of its structure were clarified (the information-cognitive, value-motivational, perceptive-interactive, and communicative-behavioral), allowing to identify the criteria and indicators of LCC. The technology of developing LCC presupposes several pedagogical conditions that produce a direct positive impact on this process. The proposed conditions can be achieved by using specific pedagogical support in the educational process with thoroughly developed methodological and thematic content. In totality, this represents the concept of LCC development and the concept of modern multi-cultural education.

Further research prospects can be found in the experimental testing of the proposed technology for the development of LCC with the use of instruments to assess the efficiency of LCC development in students in multi-ethnic groups.

REFERENCES

- Akhmetshin, E. M., Vasilev, V. L., Kozachek, A. V., Meshkova, G. V., & Alexandrova, T. N. (2021). Analysis of peculiarities of using digital technologies in the university professional training content. *International Journal of Emerging Technologies in Learning*, 16(20), 101–118.
- Aleksandrova, I., Nurutdinova, A., Malukina, G., Kladieva, O., Zolotova, Y., & Zhuchkov, V. (2023). Development of information culture, self-education, and improved level of knowledge in students as factors in the competitiveness of a future specialist. *Revista Conrado*, 19(92), 106–112.
- Dortman, S. R. (2012). *Obuchenie lingvokulturnoi kompetentsii uchashchikhsia srednikh professionalnykh obrazovatelnykh uchrezhdenii*. [Doctoral Thesis. Pyatigorsk State Linguistic University].
- Garifova, O. A. (2013). Lingvokulturologicheskaiia kompetentsiia studentov v protsesse professionalnoi podgotovki budushchikh bakalavrov servisa i turizma. *Izvestia of Samara Scientific Center of the Russian Academy of Sciences*, 15(2(4)), 880–882.
- Gorodetskaia, L. (2009). Linguocultural competence and linguocultural communicative competences: delineation of concepts. *Issues of Cultural Studies*, 1, 48–51.
- Goverdovskaya, E. V., Dokhoyan, A. M., & Tatarintseva, E. A. (2021). Psychological conditions for the development of the communicative culture of students. *Revista on line de Política e Gestão Educacional*, 25(esp. 5), 3122–3135.
- Grakhova, S., Belyaeva, N., Ganieva, G., Pavlova, N., & Sharafetdinova, Z. (2022). Desenvolvimento das formas de atividades educativas e de pesquisa em educação escolar para a formação da competência etnocultural dos alunos. *Revista on line de Política e Gestão Educacional*, 26(esp.2).
- Kartavaia, I. K. (2016). Lingvokulturologicheskaiia kompetentnost kak sostavliaiushchaia professionalizma uchitelia-filologa. *Philology. Theory & Practice*, 2(56), 185–187.
- Miroshnikova, O. Kk. (2017). *Osnovy lingvokulturnoi pedagogiki: Monografiia*. Publishing House of Southern Federal University.
- Pivneva, S., Chernova, O., Abalyan, Z., Shangaraeva, L., Rubannikova, I., & Litvinov, A. (2023). Raising the level of motivation of economics students for studying english using the Myenglishlab Blended Learning Platform. *Revista Conrado*, 19(90), 270–276.
- Podgorbunskikh, A. A. (2012a). Fenomen lingvokulturnoi kompetentnosti v paradigme sovremennogo professionalnogo obrazovaniia. *Herald of Omsk University*, 2, 436–441.
- Podgorbunskikh, A. A. (2012b). Model formirovaniia lingvokulturnoi kompetentsii studentov vuza. *Bulletin of the South Ural State University*, 14, 92–95.
- Shafazhinskaya, N., Zharov, A., Telezhko, I., & Saenko, N. (2023). Raising Teaching Efficiency: Teaching Translation of Business Correspondence to Economics Students. *European Journal of Contemporary Education*, 12(2), 590–597.
- Statsenko, A. S., & Baskova, Iu. S. (2015). *Lingvokulturnaiia kompetentsiia: Priemy formirovaniia na zaniatiiakh po inostrannomu iazyku v neiazykovom vuze: Monografiia*. Prometei.
- Suvorova, S. L. (2014). Sovremennoe iazykovoe obrazovanie s pozitsii mezhekulturnoi lingvodidaktiki. *Series: Education. Pedagogical Science*, 6(3), 64–70.
- Tereshchenko, T. M., Dmitrieva, O. A., & Pravdikova, A. V. (2018). Teoreticheskie osnovy postroeniia obrazovatel'nogo modulia, napravlennogo na formirovanie lingvokulturnoi kompetentsii v ramkakh lingvisticheskogo obrazovaniia. *Izvestia of the Volgograd State Pedagogical University*, 4(27), 30–33.
- Urakova, F. K., Zhazheva, D. D., Pkhanaeva, S. N., & Shcherbashina, I. V. (2022). Formirovanie lingvokulturologicheskoi kompetentsii na urokakh russkogo iazyka kak inostrannogo. *Pedagogical Journal*, 12(3A), 248–255.
- Vtorushina, N. Iu. (2009). Lingvosotsiokulturnyi metod prepodavaniia inostrannykh iazykov. *Almanakh sovremennoi nauki i obrazovaniia*, 8(27), 44–46.
- Zhang, T., Shaikh, Z. A., Yumashev, A. V., & Chtad, M. (2020). Applied model of E-learning in the framework of education for sustainable development. *Sustainability*, 12(16). DOI:10.3390/su12166420
- Zotova, A., Rabadanova, R., Kolganov, S., Borodina, M., & Basmanova, A. (2022). Formation of digital communication in the organizational and pedagogical activity of the university. *Revista on line de Política e Gestão Educacional*, 26. DOI:10.22633/rpge.v26i00.17330