



THE PROCESS OF DEVELOPING MULTILINGUAL COMPETENCES OF HIGHER EDUCATION STUDENTS IN A HIGHER EDUCATION INSTITUTION

O processo de desenvolvimento de competências multilíngues dos estudantes do ensino superior numa Instituição de Ensino Superior

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ABSTRACT

The article examines and defines the specifics of multilingual education based on the analysis of theoretical and practical research works in this area. The content of the concept of "multilingual competence" is specified, the component composition of multilingual competence is identified and its configuration is determined taking into account the conditions of study at a multidisciplinary university and the specifics of professional and academic activities of graduates. The principles of developing multilingual competence of an asymmetric configuration in students of a multidisciplinary university are formulated and substantiated. A methodological model for developing multilingual competence of an asymmetric configuration in students of a multidisciplinary university has been created and scientifically substantiated, including target, methodological, content, technological, organizational and result components. A system of exercises for implementing multilingual education at a multidisciplinary university has been developed based on the presented methodology.

Keywords: Education, Multilingual Education, Multidisciplinary University, Educational Technology, Methodology

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O PROCESSO DE DESENVOLVIMENTO DE COMPETÊNCIAS MULTILÍNGUES DOS ESTUDANTES DO ENSINO SUPERIOR NUMA INSTITUIÇÃO DE ENSINO SUPERIOR

The process of developing multilingual competences of higher education students in a Higher Education Institution

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RESUMO

O artigo examina e define as especificidades da educação multilingue com base na análise de trabalhos de investigação teórica e prática nesta área. O conteúdo do conceito de "competência multilingue" é especificado, a composição dos componentes da competência multilingue é identificada e a sua configuração é determinada tendo em conta as condições de estudo numa universidade multidisciplinar e as especificidades das atividades profissionais e académicas dos diplomados. Os princípios do desenvolvimento da competência multilingue de configuração assimétrica em estudantes de uma universidade multidisciplinar são formulados e fundamentados. Foi criado e fundamentado cientificamente um modelo metodológico para o desenvolvimento da competência multilingue de configuração assimétrica em estudantes de uma universidade multidisciplinar, incluindo componentes de meta, metodológicos, de conteúdo, tecnológicos, organizacionais e de resultados. Um sistema de exercícios para implementar a educação multilingue numa universidade multidisciplinar foi desenvolvido com base na metodologia apresentada.

Palavras-chave: Educação, Educação Multilingue, Universidade Multidisciplinar, Tecnologia Educativa, Metodologia

INTRODUCTION

The global goal of modern language education at a university is to ensure that graduates are adequately prepared for their subsequent successful integration into a single international socio-economic space. The success of such integration is determined by the ability and readiness of specialists to function in a multicultural and multilingual environment Beacco, J.-C., & Byram, M. (2007).

A multidisciplinary higher education institution carries out educational activities on a wide range of educational programs in different fields of knowledge. The relevance of the chosen asymmetric configuration of multilingual competence is dictated by the need to communicate in English in the professional sphere (participation in academic mobility programs, conferences, summer schools, etc.) and to carry out everyday communication in another foreign language (communication on everyday topics) Byram, M. (1997), Lüdi, G., & Py, B. (2009), Mondt, K., & Hulstijn, J. (2005).

Nevertheless, the issue of creating a methodology for multilingual teaching in a multidisciplinary university requires additional study for a number of reasons. Firstly, most of the existing studies are related to analogues (bilingual, multilingual and polylingual teaching), and not directly to the theory of multilingual teaching; secondly, they mainly consider issues of language teaching in a linguistic university, which indicates that the issue of multilingual teaching of students of a multidisciplinary university has not been sufficiently developed; thirdly, in the available individual works on the organization of multilingual teaching in a non-linguistic university, as a rule, the proposed methodology is not universal and is designed for a specific profile (or direction) of training. In addition, at present, the linguodidactic conditions of a multi-level target approach, which assumes different levels of development of the components of multilingual competence, based on the needs and level of the student, are extremely poorly used in educational practice, and in multidisciplinary universities only one foreign language is offered (usually English) Bernaus, M., & Gardner, R. C. (2008), Noguerol, A. (2018).

The requirements of the academic and professional communities for the competence of a modern university graduate have revealed a number of contradictions between:

- the global focus on productive interaction between representatives of different cultures, including the education of multilingual individuals, and the lack of interconnected teaching of several foreign languages in the programs of a multidisciplinary university;

- the significant potential of multilingual education and insufficient study of the process of organizing multilingual education in the context of domestic education in the context of a wide range of educational profiles;

- the social order of the academic and professional communities for graduates with multilingual competence, and the lack of development of the structure and asymmetric configuration of this competence in relation to graduates of multidisciplinary universities;

- the growing need for graduates of a multidisciplinary university with multilingual competence of an asymmetric configuration, and the lack of a scientifically substantiated and experimentally confirmed methodology for the formation of such competence.

The identified contradictions determined the choice of the topic of the article and allowed us to formulate the research problem: how to organize the process of multilingual education in a multidisciplinary university, applicable to a wide range of profiles and aimed at teaching two foreign languages - the language of professional culture and the language of functional communication?

The object of the article: the process of developing multilingual competence in students of a multidisciplinary university.

Subject of the article: the methodology for developing multilingual competence of an asymmetric configuration in a multidisciplinary university.

The purpose of the article: to develop and prove the effectiveness of the methodology for developing multilingual competence of an asymmetric configuration in students of a multidisciplinary university.

The hypothesis of the article: multilingual education of students of a multidisciplinary university will be effective if:

- the content, component composition and asymmetric configuration of multilingual competence in relation to the competencies in demand in the professional and scientific activities of graduates of a multidisciplinary university are determined;

- the principles of multilingual education are formulated, taking into account the psycholinguistic features of mastering two foreign languages in the conditions of a multidisciplinary university;
- a methodological model for the formation of multilingual competence of an asymmetric configuration in students of a multidisciplinary university is developed and implemented.

The methodological basis of the study is the theoretical principles of competence-based and the theoretical basis of the study is made up of the provisions of the general methodology for studying foreign languages: J-C Beacco, M. Byram, M. Bernaus, J. Cenoz, D. Coste, D. Gorter, G. Lüdi, A. Noguerol, Ch. Tremblay, J.M. Vez, G. Zarate, L. Zuheros-Garrido, K. Mondt, P. V. D. Craen.

1 METHODS

To solve the set tasks, the following methods of scientific research were used:

theoretical: analysis of scientific and methodological literature in the field of general methods of teaching foreign languages, methods of multilingual teaching, teaching a second foreign language, professionally oriented foreign language teaching and psycholinguistics; methodological modeling; analysis and synthesis of theoretical and empirical material;

empirical: pedagogical observation; forecasting results, planning stages and conducting a pedagogical experiment; questionnaires; experimental work; statistical data processing and interpretation of results.

2 RESULTS

Results of the research:

1. Multilingual education in its modern interpretation differs from similar areas of bilingual, polylingual and multilingual education. It is advisable to define multilingual education as an organized process of teaching several foreign languages in an artificial environment with each language assigned its own functionality, which determines the content of training and the level of training.

2. Multilingual competence is the ability and readiness to carry out communicative activities using a language repertoire, where the degree of proficiency in each language is determined by the scope of its application, set of competencies and level. The formation of multilingual competence of an asymmetric configuration in the conditions of a modern multidisciplinary university can be carried out through the study of the first foreign language as the language of professional culture (English) and the second foreign language as the language of functional communication.

3. In relation to the conditions of a multidisciplinary university, we mean the following component composition of multilingual competence: professionally oriented speech competence in English as the language of professional culture, general speech competence in Spanish as the language of functional communication and integrative competence, which includes competence in expanding the language repertoire (corresponds to strategic competence) and competence in using the language repertoire in speech (corresponds to the code-switching mechanism). The main function of integrative competence is to integrate the components of competence within the framework of one general system of multilingual competence.

4. The proposed methodological model for the formation of multilingual competence in students of a multidisciplinary university: 1) is built within the framework of competence-based, cognitive, interdisciplinary and activity-based approaches to teaching; 2) is based on the put forward principles of training (basic learning strategies; organization of educational and cognitive activity depending on soft skills; situational afferentation; reverse afferentation; minimization of intra-linguistic interference; iterative-level organization), determining the structure of the iterative-level system of exercises; 3) is implemented through a set of methods (explanatory-illustrative; problem-based learning; reproductive; partial-search method; research; role-playing game); 4) provides for the organization of training around the axis of soft skills of students - this refers to the term "soft skills", corresponding to the concept of universal competencies - (time management, adaptability, concentration, communication skills); 5) involves the active use by students of basic learning strategies for the development of linguistic repertoire. 5. The developed iterative-level system of exercises for the implementation of multilingual education in a multidisciplinary university based on the presented methodology algorithmizes the educational actions of students

in the process of forming professionally-oriented speech competence, in such a productive type of speech activity as speaking (monologue and dialogic speech) as components of multilingual competence.

The scientific novelty of the article consists in the development of a methodological model for the formation of multilingual competence of an asymmetric configuration in the conditions of a multidisciplinary university. The structure and configuration of multilingual competence are determined, the process of forming multilingual competence based on the integration of a dual goal of teaching foreign languages is considered: the development of a professionally oriented competence of the language of professional communication and the development of general speech competence of the language of functional communication. The article identifies and describes the principles of organizing multilingual education taking into account the conditions of a multidisciplinary university, an iterative-level system of exercises for the formation of speech competence as a component of multilingual competence is created. Theoretical significance of the article:

the concept of the term "multilingual competence" is clarified in relation to the process of foreign language teaching of students of a multidisciplinary university, the components of multilingual competence are identified, including professionally-oriented speech competence in the language of professional culture, general speech competence in the language of functional communication and integrative competence (includes knowledge, skills and abilities in the application and independent development of the language repertoire); the asymmetric configuration of multilingual competence is determined;

the principles of organizing multilingual education in a multidisciplinary university are identified;

the content and procedural components of the methodology for developing multilingual competence in students of a multidisciplinary university are developed;

the indicators for assessing the level of development of multilingual competence are identified. Practical significance of the study:

Training materials have been developed to develop multilingual competence of an asymmetric configuration in students of a multidisciplinary university, in particular an iterative-level system of exercises;

The described theory and methodology can be used to create specialized teaching aids for each training profile;

The methodology proposed by the author can be extrapolated to the teaching of other foreign languages in a multidisciplinary university.

The results of the research contribute to the development of practical aspects of foreign language teaching methods in the field of multilingual education, improving the quality of professionally oriented foreign language teaching of students of a multidisciplinary university, and expanding the range of graduates' competencies for their successful integration into the international professional and academic environment.

3 DISCUSSION

Theoretical foundations of developing multilingual competence in students of a multidisciplinary university - the plurilingual paradigm of multilingual education is considered; based on a comparative analysis of bilingual, multilingual and polylingual education, specific characteristics of the modern interpretation of multilingual education are described. The definition of the term "multilingual competence" is formulated, and its component composition is determined Cenoz, J. (2013), Tremblay, C., & Gardner, R. C. (1995), Zarate, G. (1986). The content and implementation of the principles of organizing multilingual education in a multidisciplinary university are listed and described in detail.

The field of teaching several languages is represented by a number of areas: bilingual education, multilingual education, polylingual education and multilingual education proper. On the one hand, the listed areas in a broad sense can be attributed to multilingual education, on the other hand, multilingual education in a modern interpretation is based on the concept of plurilingualism and has a number of distinctive characteristics.

The problem of studying bilingual, multilingual and polylingual education in science has received considerable attention Coste, D., Cavalli, M., & Egli Cuenat, M. (2009). The paper compares them as relatively equal variations of multilingual education in a broad sense. Bilingual education can be considered as a special case of multilingual and polylingual education Vez, J. M. (2001), Van De Craen, P. (2001). As a rule, bilingual education is understood as teaching a second foreign language based on the first. Multilingual education involves teaching

several foreign languages, implemented in an artificial environment, and is typical for multidisciplinary and linguistic universities.

Comparison of the modern interpretation of multilingual education and traditionally considered directions of bilingual, multilingual and polylingual education allowed us to draw a conclusion about the distinctive characteristics of the first, inherent in the underlying concept of plurilingualism: learning several languages is welcomed and considered an achievable goal; the task is to master a level sufficient for using the language in speech; asymmetry of language proficiency is set; shifting the emphasis from mastering the content of the program to mastering educational strategies, to developing the ability to learn languages, etc. In other words, all previous concepts of teaching several foreign languages were built on the principle of subordination and symmetry, each new language was studied on the basis of comparison and contrast with the previously studied or studied languages.

Analysis of the works allowed us to conclude that the concept of "multilingual education" can be defined as follows - it is an organized process of teaching several foreign languages in an artificial environment with each language assigned its own functionality, determining the content of training and the level of training. Assigning a functional role to a language outlines the boundaries of the learning content, which in turn, on the one hand, allows for the rational use of the learner's resources - time and effort, and on the other hand, simplifies the operation of the code-switching mechanism, since each code (language) receives an associative connection with a specific situation of use (for example, English is used to discuss professional topics, and Spanish is used to communicate on everyday topics). The code-switching mechanism is the ability and readiness to use two foreign languages alternately in speech depending on the communicative task dictated by the sphere of communication - either the sphere of professional communication (English) or the sphere of everyday communication (Spanish).

As follows from the scientific literature, the goal of multilingual education is to develop multilingual (communicative) competence. In the works of world researchers, it is customary to talk about the formation of "multilingual and multicultural competence", while in the works of Ukrainian scientists, multicultural and multilingual competence are considered separately. The accumulation of various views on the essence of multilingual competence allows us to interpret this term as the ability and readiness to carry out communicative activities using a language repertoire, where the degree of proficiency in each language is determined by the scope of its application, set of competencies and level.

Taking the point of view of scientists who point to asymmetry as one of the main properties of multilingual competence, in relation to the conditions of study in a multidisciplinary university, we highlight the following asymmetry:

- English acts as the language of professional culture, and the degree of proficiency in it is determined by professionally oriented speech competence in relation to the professional sphere; – Spanish acts as a functional language of communication, and the level of proficiency in it is determined by general speech competence in relation to the public sphere of communication.

Based on the analysis of different approaches to defining the component composition, the structural elements of multilingual competence relevant to the purposes of the study were identified, namely: general speech competence; professionally oriented speech competence; integrative competence.

To create a methodology for multilingual teaching in a multidisciplinary university, the principles of teaching were formulated based on the analysis of scientific works. The principle of integrativity implies the integration of two languages in one methodological model, professional topics and language content, professionally oriented teaching and a general course. The principle of basic educational strategies involves switching students' attention from the content of training to learning activities. The principle of organizing educational and cognitive activity depending on soft skills sets the task of long-term behavior tracking and is implemented through dividing the educational material into blocks of concentration, adaptability, communication and time management. The principle of situational afferentation is implemented through the presentation of requirements for the level of instruction in the formatting of educational material. The principle of reverse afferentation assumes the student's awareness of the fact that he/she has achieved a local learning goal as a result of using a certain learning strategy. The principle of minimizing intralingual interference is applied to the selection of learning content and consists of distancing similar language elements in the course of study, the simultaneous mastery of which will lead to interference of skills - for example, the constructions "used to do" and "to be used to do"). The principle of iterative-level organization is implemented through an iterative-level system of exercises.

Formation of multilingual competence in students of a multidisciplinary university - the methodology of forming multilingual competence is described, the levels and indicators of formation of multilingual competence as part of general speech competence, professionally oriented speech competence and integrative competence are defined; the course and results of experimental training are presented.

The development of the teaching methodology predetermined the need to create a training model. The methodological model is presented as a structural reflection of a holistic methodological model consisting of target, methodological, content, technological, organizational and result components.

The target component includes strategic and practical training goals. The strategic training goal is to form multilingual competence in students of a multidisciplinary university. Due to the specific nature of multilingual education, the practical goal of training is twofold: development of professional speech competence in English (B1-B2) and development of general speech competence in Spanish (A1) Zuheros-Garrido, L., & Martin-Laguna, A. (2020).

The methodological component contains approaches and principles for organizing multilingual education. The proposed model has been developed within the framework of the following approaches: competence-based, interdisciplinary, cognitive and activity-based.

Within the framework of the competence-based approach, the goal of the proposed model of multilingual education has been formulated, components of competence and indicators for assessing the results of multilingual education have been identified.

Within the framework of the interdisciplinary approach, on the one hand, the content component of two different language disciplines - English and Spanish - are integrated in one training model, on the other hand, when teaching English, the content components of the general discipline "Foreign Language" are integrated.

Within the framework of the cognitive approach, it is assumed that the student is aware of the didactic usefulness of the educational activities performed by him.

According to the activity approach, the teacher acts as a moderator of the learning process, encouraging the active independent work of the student in performing educational activities, as well as organizing the learning process mainly through the format of pair or group work.

The methodological component served as the basis for developing a system of exercises. The proposed iterative-level system of exercises is based on the traditionally accepted division of exercises into types (introductory, linguistic, conditional speech and speech) and types (imitation, substitution, transformational, reproductive and differentiating) with the addition of another dimension - iterativity, where each iteration assumes gradation of the material by language levels - exercises at the level of a word, sentence and text. Accordingly, the first iteration involves the initial presentation of new educational information in the most simplified conditions (e.g., "In the echo mode, repeat the sentences after the teacher, copying the intonation," "Read the text," etc.). The second iteration is the secondary presentation of the same educational material using more complex actions on the part of the student (e.g., "Answer the questions on the text," "Express your opinion on the problem," etc.). Cyclic iteration is built on the symbiosis of two elementary exercises (usually at the word and sentence level, e.g., "Open the brackets," "Transform the active voice into the passive voice," etc.) and one complex task (at the text level, e.g., "Listen to the podcast, take notes on the main ideas, present the content of the podcast based on the notes"). Cyclic iteration is designed for repeated reference to it by students during the course, both independently and during classroom lessons.

To implement the model in practice, the following teaching aids were used: Spanish language teaching materials for level A1 for developing general speech competence, English language teaching materials for level B2 for developing professionally-oriented speech competence, podcasts freely available on the Internet, videos on the YouTube platform, the Google Forms service for conducting listening and testing, and the Google Drive platform for maintaining a card index of students' notes.

At the level of educational materials, the languages interact indirectly - each language has a separate teaching aid that provides for a virtually identical algorithm of learning actions on the part of the student when learning two languages, thus, for the purpose of learning both languages, the student uses the same learning strategies. Direct interaction between languages occurs at the stage of the final interview: the student is asked to answer interview questions on professional topics in English, and then switch to Spanish to build a dialogue on everyday topics. This exercise is aimed at training the code-switching mechanism. The result component includes

a description of the levels of development of multilingual competence in students of a multidisciplinary university: high, average and minimal. Descriptors of the identified levels of proficiency in multilingual competence are divided into three groups: 1) descriptors of professionally oriented speech competence in English; 2) descriptors of general speech competence in Spanish; 3) descriptors of integrative competence.

The preparatory stage includes: a) analysis of scientific literature on the problem of multilingual education of students of non-linguistic specialties; b) observation of foreign language educational activities of students of a multidisciplinary university; c) questionnaire survey of students who speak at least one foreign language in addition to English; d) determination of variable and non-variable conditions of the experiment. Due to the specifics of the study, during the educational experiment, the second foreign language was introduced from scratch in both groups, and the first foreign language - English - was taught as part of a professionally oriented course. Thus, before the start of the experimental training, it was not possible to measure multilingual competence in the designated asymmetric configuration. Measurements of the formation of multilingual competence in both groups were carried out at the final stage. To assess the level of multilingual competence, an assessment scale, a test and an individual oral interview in the interview format were developed.

CONCLUSION

Thus, the specifics of multilingual education are considered and defined based on the analysis of theoretical and practical research works in this area.

The content of the concept of "multilingual competence" is specified, the component composition of multilingual competence is identified and its configuration is determined taking into account the conditions of study in a multidisciplinary university and the specifics of professional and academic activities of graduates. The principles of forming multilingual competence of an asymmetric configuration in students of a multidisciplinary university are formulated and substantiated. A methodological model for forming multilingual competence of an asymmetric configuration in students of a multidisciplinary university is created and scientifically substantiated, including target, methodological, content, technological, organizational and result components.

A system of exercises for the implementation of multilingual education in a multidisciplinary university based on the presented methodology is developed. A pedagogical experiment is conducted in order to test the developed methodological model for forming multilingual competence, and the results obtained are described and analyzed.

REFERENCES

- Beacco, J.-C., & Byram, M. (2007). *From linguistic diversity to plurilingual education: Guide for the development of language education policies in Europe*. Strasbourg: Council of Europe Publishing.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.
- Bernaus, M., & Gardner, R. C. (2008). Teacher motivation strategies, student perceptions, student motivation, and English achievement. *The Modern Language Journal*, 92(3), 387–401. <https://doi.org/10.1111/j.1540-4781.2008.00753.x>
- Cenoz, J. (2013). The influence of bilingualism on third language acquisition: Focus on multilingualism. *Language Teaching*, 46(1), 71–86. <https://doi.org/10.1017/S0261444811000218>
- Coste, D., Cavalli, M., & Egli Cuenat, M. (2009). *Plurilingual and intercultural education as a project*. Strasbourg: Council of Europe Publishing.
- Gorter, D. (Ed.). (2006). *Linguistic landscape: A new approach to multilingualism*. Multilingual Matters.
- Lüdi, G., & Py, B. (2009). To be or not to be ... a plurilingual speaker. *Journal of Multilingual and Multicultural Development*, 30(6), 491–506. <https://doi.org/10.1080/01434630903147898>
- Noguerol, A. (2018). *La educación plurilingüe: Desafíos y oportunidades*. Barcelona: Ediciones Universitat.
- Tremblay, C., & Gardner, R. C. (1995). Expanding the motivation construct in language learning. *The Modern Language Journal*, 79(4), 505–520. <https://doi.org/10.2307/330004>
- Vez, J. M. (2001). Multilingual education in Europe: Policy developments. *Language Teaching*, 34(4), 205–218. <https://doi.org/10.1017/S0261444800015534>

- Zarate, G. (1986). *L'enseignement de la diversité linguistique*. Paris: Didier Erudition.
- Zuheros-Garrido, L., & Martin-Laguna, A. (2020). Bilingual education policies in Spain. *International Journal of Multilingualism*, 17(1), 58–75. <https://doi.org/10.1080/14790718.2019.1602029>
- Mondt, K., & Hulstijn, J. (2005). Dynamics in second language development. *Applied Linguistics*, 26(3), 491–506. <https://doi.org/10.1093/applin/ami016>
- Van De Craen, P. (2001). CLIL: A new approach in language education. *Language and Education*, 15(3), 264–282. <https://doi.org/10.1080/09500780108666817>