

МЕТОДОЛОГИЯ И ТЕХНОЛОГИЯ ПРОФЕССИОНАЛЬНОГО ОБРАЗОВАНИЯ/METHODOLOGY AND TECHNOLOGY OF VOCATIONAL EDUCATION

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CONCEPTS OF ENGLISH LANGUAGE MODELING BASED ON THE SPATIAL-CULTURAL PARADIGM OF THE TECHNICAL UNIVERSITY

Research article

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Abstract

The purpose of the study is to determine the main conceptual provisions of teaching a foreign language in the spatial-cultural paradigm of a technical university in the process of studying the English language by students.

The article develops a model for training a specialist in the spatial-cultural paradigm by means of a foreign language. The main ideas of the concept on which this model is based, the principles of building the educational space of a technical university, the author's interpretation of the process of teaching the English language in the educational space of a technical university are determined.

The scientific novelty of the study is seen in the fact that the role of technical universities is currently becoming fundamentally different — training creators who have knowledge of the laws of nature, capable of creating an artificial world, developing and improving it on the basis of a dialogue of specialists from different countries.

As a result of the study, it was established that it is precisely the spatial-cultural paradigm of studying the English language that serves as the methodological basis that allows the development of pedagogical conditions that provide the student with the opportunity to become a true subject of activity, to determine meanings, values, their own methods of self-realization and life strategy in general.

Keywords: professional activity, educational space, paradigm, foreign language, humanization.

КОНЦЕПЦИИ МОДЕЛИРОВАНИЯ АНГЛИЙСКОГО ЯЗЫКА НА ОСНОВЕ ПРОСТРАНСТВЕННО-КУЛЬТУРНОЙ ПАРАДИГМЫ ТЕХНИЧЕСКОГО УНИВЕРСИТЕТА

Научная статья

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Аннотация

Цель исследования — определить основные концептуальные положения преподавания иностранного языка в пространственно-культурной парадигме технического вуза в процессе изучения студентами английского языка.

В *статье* разработана модель подготовки специалиста в пространственно-культурной парадигме средствами иностранного языка. Определены основные идеи концепции, на которых строится данная модель, принципы построения образовательного пространства технического университета, авторская трактовка процесса преподавания иностранного языка в образовательном пространстве технического вуза.

Научная новизна исследования видится в том, что роль технических вузов в настоящее время становится принципиально иной — подготовка творцов, владеющих знанием законов природы, способных создавать искусственный мир, развивать и совершенствовать его на основе диалога специалистов разных стран.

В *результате исследования* установлено, что именно пространственно-культурная парадигма изучения английского языка выступает той методологической основой, которая позволяет разработать педагогические условия, обеспечивающие студенту возможность стать истинным субъектом деятельности, определить смыслы, ценности, собственные способы самореализации и жизненную стратегию в целом.

Ключевые слова: профессиональная деятельность, образовательное пространство, парадигма, иностранный язык, гуманизация.

Introduction

The relevance of this study is due to the fact that in the modern era, the level of humanitarian education is rising, the cultural informativeness of knowledge as a foundation for the development of personal growth is increasing, and a characteristic feature of the modern professional activity of a future lower-level teacher is the actualization of linguistic training. The lack of humanitarian knowledge, priorities, and adequate time for worldview leads to professional errors that are multiplying like an avalanche today. In the educational aspect, this is a self-reflection of one's profession and its limits, awareness and objective assessment of technical and humanitarian education, familiarity with the culture of the language being studied, its representatives, traditions, paradigms of thinking and forms of life inherent in this culture, etc.

To achieve the set goal, the following *tasks* should be solved:

- formulate the fundamental conceptual foundations of teaching an English language in the spatial — cultural paradigm of a technical university;
- develop a model for training a future specialist — engineer in the spatial-cultural paradigm by means of English language;
- identify key aspects of the concept of the process of implementing the humanization of the educational space of a technical university;
- determine the criteria for the structuring of the linguistic personality;
- analyze the processes of forming the linguistic personality of a student and clearly define and set strategic and tactical goals for training specialists — engineers in the spatial model of education.

To implement the above objectives, both theoretical and empirical *research methods* were used: conceptual and terminological analysis of scientific literature to describe a person's self-determination in the educational space, the conceptual modeling method to develop a conceptual model for training a specialist in a spatial and cultural paradigm based on traditional ethical standards, and an empirical study of the self-development of students at a technical university based on observations.

The methodological basis of our research is the cultural and spatial paradigm of education, the concept of the causality of self-development of the individual in light of his active participation in activities and communication.

Object of research: the educational system of higher education in the aspect of the spatial-cultural paradigm in the process of learning English.

Subject of the research: spatial organization of the process of studying a foreign language in a technical university.

The theoretical basis of the study was the works of representatives of higher education pedagogy and linguistics (Bondarevskaya E.V., 2007); theories of personality development (Leontyev A.N., 2005); ideas of humanization of technical education (Prudnikova E.F., 2006); cultural theories (Glagolev A.B., 2024; Baukina S.A., Novikova I.V., 2020); theory of educational space (Gukalenko O.V., 2021; Kulikovskaya I.E., L.V. Abdulmanova and A.V. Reznichenko, 2015).

The practical criterion for assessing scientific research is the possibility of applying its main provisions and conclusions as a methodological basis for teaching a foreign language and increasing the effectiveness of the educational process in the course of teaching foreign languages in technical universities.

Research methods and principles

The study of fundamental theories of the modern educational process of an English language in the context of higher education institutions and the system of theoretical knowledge about the aspects of humanization of the educational space of the university allowed us to formulate the main conceptual provisions in the field of teaching the discipline "Foreign Language" in the context of the spatial-cultural paradigm.

The model of high-quality training of a future specialist in the aspect of the spatial-cultural paradigm implemented by means of an English language integrates the concept and program of improving the process of prospective development of humanization of the educational space of a higher technical institution. The program combines: content, effective mechanisms for ensuring the humanization of the educational space of a modern technical university, indicators for assessing compliance with the requirements and final indicators of self-determination of students in the educational space of the university [11].

The need to construct a model of professional training of a future specialist in the aspect of the spatial-cultural paradigm using language tools is due to significant difficulties in organizing humanitarian education in the space of a technical university. These barriers are due to:

- the lack of structure of the concept, reflecting the specifics of the representativeness of humanitarian knowledge in technical education;
- limitations in the organizational potential of universities in the field of the educational process;
- the problem of restructuring the educational process as a whole as a result of changes in specialized sets, academic disciplines and courses, as well as due to the transition to a two-stage system of education "bachelor — master", which caused an aggravation of the problem of distribution of study time, especially in the junior years;
- psychological opposition of the teaching technical association to social-theoretical and humanitarian academic disciplines due to fears of continued "brainwashing" due to the impossibility of a quick change of personnel and a general distrust of social-scientific methods of cognition.

To overcome these difficulties, we have developed a model for training future specialists in the aspect of spatial-cultural paradigm by means of a foreign language. Let us outline the main ideas of the concept:

- the idea of humanizing higher professional education;
- the idea of the educational space of a technical university;
- the idea of students' meaning-forming activity during the process of learning a foreign language as a sociolinguistic basis for determining a student's "personal place" in the educational space of the university.

Humanization of higher professional education is especially relevant at the current stage of development of all education. The factor of humanization is the identification of *humanitarian causality* in technical education. Recently, scientists and engineers are faced with the fact that their activities are not impersonal for society, that they not only create a positive picture of the world and drive progress, but also have a destructive effect on nature, technicize society and distort spiritual values. In this regard, it is undoubtedly necessary to turn to various humanitarian disciplines, namely, for scientists and engineers to understand the negative consequences of their activities for nature and man, the anti-humanitarian nature of engineering and technical work. But, naturally, we are talking not only about the specified moments of humanization of technical science, it is also associated with a certain content [5, P. 15].

Current reality requires not only the training of qualified engineers, but also their mastery of the general cultural level within the framework of an in-depth level of mastering technical and humanitarian education, in particular foreign languages [7].

The concept of educational space is based on the definition by the student of his “personal place” in the context of a technical university. Within the educational space, integration and differentiation of all kinds of cultural languages takes place: at the university level — technical, humanitarian, natural science; at the level of the individual — meanings and values in the organization of personal and professional activity [10, P. 164]. For us, the most significant thesis was that the space of personality development presupposes its free movement in the world of different cultures, self-determination not only in the small, native, but also in the big world. Cultures develop in a dialogic space that ensures their interaction and self-determination of the individual in the world cultural era. Modern society quite often puts a person on the border of different cultures. He faces a very difficult problem: how to preserve his cultural identity and successfully adapt in a multicultural environment. And it is the educational space that is called upon to help solve this dilemma [3].

The concept of meaning formation is formed based on the understanding of the essence of the educational space of the university. Educational materials can be endowed with life and personal meanings. Personal meaning significance represents the “internal driving force” of the subject and connects meanings (for example, his activity) with the reality of the subject’s life in the world. Meaning formation is derived from the real being of the subject, focused on the object of activity, regardless of consciousness [4, P. 10].

These provisions allowed us to assume that the formation of new personal meanings will increase the activity of the individual, his ability to navigate in life, which was the basis of the model we developed. The personal significance and semantic content of educational activities increase when performing reconstructive and heuristic actions. In the model we propose, practical actions associated with solving problematic tasks from the life experience of students or with their future profession dominate [7].

The concept of teaching a foreign language as a sociolinguistic basis is based on the fact that language acts as a trajectory through which a student can immerse himself in the modern thinking of the speakers of a linguoculture formed in a historical and cultural context. Linguistics studies the material and spiritual culture embodied in a living national language and manifested in linguistic processes. This theory allows a student to determine his place in the culture of another people, expressed in their language, as well as the relationship between the literary and non-literary forms of its existence, which are determined by the entire course of development of the cultural history of society: the history of its writing, literature, worldview, its cultural and ideological sympathies, etc. [6].

In the formation and development of a linguistic personality, a key role is played by the development of students' abilities and skills to objectively perceive the society that surrounds them, to choose adequate forms of communication in a business and emotional alliance with the team, which undoubtedly contributes to the formation of the need for communication and helps to fluently speak a foreign language [9, P. 46].

Main results and Discussion

As key criteria for a linguistic personality in the process of learning English, we note:

- from the point of view of the *phonetic system*: clear and literate speech manner, correct intonation and sustained timbre of voice;
- from the point of view of the *lexical system*: diversity of vocabulary, language characteristics and preferences, skillful citation and casual use of borrowings from foreign languages;
- from the point of view of the *syntactic system*: a wide range of syntactic turns;
- from the point of view of *stylistics*: the choice of an appropriate style of presentation taking into account communicative tasks [13].

The linguistic personality prevails in the cultural sphere reflected in the language, in the forms of social consciousness at the everyday, scientific and professional levels, in behavioral standards and norms, in cultural values, etc. Language contributes to the understanding of the original and deep worldview and creates such a linguistic image and a hierarchical system of spiritual teachings that are the foundation for the formation of national character, mentality, national culture and are realized in the process of linguistic dialogue communication [12].

It should be emphasized that the formation of the linguistic personality of the student is realized in the process of his interaction with certain professional relations. As a result, the linguistic personality becomes a kind of realization of historical, cultural and technological significance in the process of active speech and thinking activity in accordance with the norms and standards set by the ethnolinguistic and national-professional culture [2], [8].

In accordance with the conceptual foundations that determined the formation of a fundamentally new spatial paradigm of education, certain *principles* were built on which the model of training engineering personnel in the spatial - cultural paradigm by means of a foreign language was based:

- *the principle of openness*; due to the possibility of its application in the context of various existing models of teaching a foreign language;
- *the principle of spatiality*, containing the characteristics of a student's place at a technical university;
- *the principle of cross-culturality*, aimed at comparing the norms, values, stereotypes of behavior of one's own culture and self-worth, significance, the role of integration for the purpose of successful identification and adaptation of the individual in the culture of the studied language [1, P. 3];
- *the principle of personification*, consisting in the maximum immersion of students in the topics or problems studied in a foreign language, taking into account their accumulated life experience. The principle of personification is support for the student in overcoming the state of alienation from theoretical knowledge.

Based on the analysis of development trends of the modern engineering environment and the requirements for a modern engineer, our work defines *the goals of studying English* by students of a non-linguistic university.

The strategic goal of training specialists — engineers by means of a foreign language, in our opinion, is the ideal image of a competent specialist who has the appropriate cultural level, a respectful attitude towards the traditions of his people and other cultures, and who can adapt personally and professionally in a team. This strategic goal is realized in such *tactical tasks* as:

- to understand the dynamics and patterns of development of society, influencing the development of science and technology;
- to develop the ability to predict the social, economic and environmental consequences of engineering activities;
- to develop rational habits for continuous self-education, self-improvement, determining one's place in professional society;
- to form moral principles for assessing the correctness of the social consequences of one's professional activities and responsibility for them.

In our opinion, the goals of modern social and scientific education in technical universities can be achieved through:

- actualization of the meanings of a foreign language in the knowledge of technology and engineering in blocks of social and scientific and humanitarian disciplines, which should be reflected in the programs of basic and special courses;
- socio-cultural potential of general scientific and general technical disciplines, which will allow bringing the goals and results of educational and technical activities closer to general cultural values.

Conclusion

Thus, as a result of the conducted research, firstly, the set objective was achieved — the main conceptual provisions of teaching a foreign language in the spatial and cultural paradigm of a technical university in the process of studying English by students were determined. Secondly, the tasks outlined in the introductory part were also fully solved:

- the main conceptual provisions of teaching a foreign language in the spatial and cultural paradigm were formulated;
- a model of training a specialist in the spatial and cultural paradigm by means of a foreign language was developed;
- the main ideas of the concept on which the model of training a specialist and the implementation of the process of humanization of the educational space of a technical university are based were outlined;
- the criteria for the formation of a linguistic personality and the author's interpretation of the process of teaching a foreign language in the educational space of a technical university were defined and formulated;
- the processes of formation of a student's linguistic personality were analyzed and the strategic and tactical goals of training specialists — engineers in the spatial and cultural paradigm of a technical university in the process of studying a foreign language by students were formulated.

Summarizing the above, it was possible to draw the following *conclusions* about the current research trends:

- 1) the model of training a specialist in the spatial-cultural paradigm by means of a foreign language is focused on the development of qualitative characteristics of university graduates, their basic values, personal and professional image;
- 2) in higher technical institutions, a foreign language is one of the few disciplines, the study of which helps to maintain the general cultural level of students at the proper level;
- 3) the ascertaining study showed different levels of development of students' self-determination in the educational space of the university;
- 4) the dynamics of changes in readiness for self-determination, the increase in the importance of studying a foreign language allow us to conclude that English language is a means useful for the development of creative abilities and creative communication — dialogic and collective.

Since each student is a native speaker of a certain language, he also acts as a bearer of culture, and linguistic signs acquire the function of signs of culture. The obtained conclusions allow us to say that it is the spatial-cultural paradigm of studying English language that serves as the methodological basis that allows us to develop pedagogical conditions that provide the student with the opportunity to become a true subject of activity, to determine meanings, values, their own ways of self-realization and life strategy in general.

Конфликт интересов

Не указан.

Рецензия

Все статьи проходят рецензирование. Но рецензент или автор статьи предпочли не публиковать рецензию к этой статье в открытом доступе. Рецензия может быть предоставлена компетентным органам по запросу.

Conflict of Interest

None declared.

Review

All articles are peer-reviewed. But the reviewer or the author of the article chose not to publish a review of this article in the public domain. The review can be provided to the competent authorities upon request.

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