

ТЕОРИЯ И МЕТОДИКА ПРЕПОДАВАНИЯ

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THE THEORETICAL CONTEXT OF INTEGRATED SUBJECT AND LANGUAGE TEACHING AT THE UNIVERSITY

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Abstract. A retrospective analysis of major domestic and foreign scientific works devoted to the problem of integrated, professionally oriented and subject-language learning that served as the basis for the development of the idea of integrated subject and language learning is represented. The authors analyze the similarities and differences of these types of learning, describe the purpose of the educational process, depending on the type of training selected as well as adequate tasks on the basis of not an isolated language learning, but a subject-based professional learning with interdisciplinary interaction. A review of modern psychological and pedagogical research on the problem of the implementation of integrated subject-language learning in domestic and foreign practice of teaching at a University is proposed. The scientific basis for the implementation of integrated subject-language teaching in non-linguistic universities, based on the research of Russian linguists, educators, psychologists and methodologists is considered. The problem of interdisciplinary integration in the system of higher education of the Russian Federation is examined and models of integrated teaching of foreign languages in the context of the future specialty in the scientific literature that reflect the main directions of development of modern Russian higher education are proposed. The methodology of the research is based on theoretical methods (analysis, comparison, synthesis, generalization). The main results of this study are the reasoned conclusions about similarities, differences, pedagogical approaches in the implementation of integrated subject-language learning in domestic and foreign scientific schools.

Keywords: integration; professionally-oriented training; integrated subject-language learning; multidisciplinary collaboration; LSP; ESP; GE.

Introduction

The relevance of the research topic is dictated by the requirements of the State program of the Russian Federation “Development of Education in 2018–2025”, which is focused on strengthening the positions of Russian higher education in the world. One of the priority tasks for the period of implementation of the program is the development of the project “Modern Digital Educational Environment of the Russian Federation” through the program “Development of an Integrated System of Highly Skilled Personnel”

through the introduction of adaptive systems of the purposeful practically-oriented development of students' competences [1]. In other words, the government sees the need to provide opportunities of ongoing education to all citizens of the Russian Federation, regardless of the spatial location of the student or professional who needs additional information. For this purpose the phased implementation of the digital education space is being realized: distance learning, online courses, blended learning, various tools of digital learning, the development of electronic textbooks, electronic libraries, etc. Besides, cooperation with educational institutions of other countries is envisaged, which emphasizes the continuing trend of globalization and integration of national education systems of the whole world. Thus, the internationalization of education system of universities in Russia is possible in the case of development of academic mobility, which includes knowledge of the foreign language for everyday and business / professional communication, which requires, in its turn, updating content in a foreign language teaching, taking into account modern realities.

The main objectives of the research are:

- analysis and backing of the basic theoretical ideas of professionally oriented teaching foreign languages in higher education in domestic science;
- studying the main theoretical ideas of LSP, ESP, GE, CLIL that are the basis for integrated subject-language learning in a foreign science;
- defining scientific approaches and principles in the process of implementation of the idea of subject-language teaching in the higher education system of the Russian Federation.

Methodology

The following theoretical methods adhering to the principle of systemic approach to the analysis of the investigated phenomena were used in the given research: analysis, comparison, synthesis, generalization. The methodological basis of the present investigation rests on the works of scientists in the field of the theory of discourse [2], in the field of language as self-developing system [3], and in education technologies in the age of globalization [4, 5].

Research and Results

One of the most popular research areas aimed at further improving the level of higher education is the teaching the subject knowledge in a foreign language. In this case a foreign language is a means of mastering the necessary knowledge and skills in the major discipline. This interaction of special subjects and a foreign language in the Russian scientific and pedagogical literature is associated with the concept of “integration”, which, in the con-

text of the question under study, is understood as the possibility of organic unification of the trends, systems, approaches, and content of educational programs of various disciplines, which contributes to the quality of training of modern specialists (A.Y. Danilyuk, V.N. Maksimova, etc.). The transition [6] to integrative learning is considered to be a natural process that is the consequence of the implementation of interdisciplinary approach in the transition in the educational process from theory to practice of teaching that leads to optimizing university training. In other words, a change of educational paradigm is envisaged from professionally-oriented to the integrated one in the course of foreign language training at higher educational institutions, which is actively being developed in European countries and finds a positive implementation experience at universities of the RF.

A great number of domestic research works are devoted to the integrated teaching of foreign languages and professional disciplines, defined as an integrated subject-language learning (N.V. Bagramova, I.D. Zverev, V.N. Fedorov, etc.), the practical implementation of which involves the interaction of teachers in majors and a foreign language. This kind of “cooperation” of teachers of different disciplines is described in the foreign scientific and pedagogical literature, and is, on the one hand, integration at the level of joint development of guiding documents (collaboration, cooperation) (L.F. Gardiner, T. March), and, on the other hand, at the level of binary learning (team-working) (J. Dewey, C.H. Olgren).

The retrospective analysis of professionally-oriented learning allows us to determine its main difference from integrated subject-language learning, with the aim of identifying teachers who have gained a positive experience, and to avoid known and anticipated challenges in the transition to a new learning approach at the university.

The trend of professionally-oriented foreign language teaching was initiated by T. Hutchinson and A. Waters in the 1970s. They examined the variability of communicative situations and the use of language units depending on the context and proved the necessity of the use of a specific linguistic reservoir in various communicative acts for the educational purposes that resulted in the change of methodology of teaching foreign languages. T. Hutchinson and A. Waters, analyzing innovations in linguistics that occurred in the 1960s of the previous century, based on the research works of N. Chomsky and D. Hymes (“On Communicative Competence”), concluded that language for special purposes (LSP) and English for specific purposes (ESP) are based on communication, in which they identified several levels: functional, structural and discursive. Basing on the notion “communicative competence” introduced by D. Hymes, T. Hutchinson and A. Waters proved the importance of understanding the situational appropriateness of language, i.e. the ability to use in practice not only the “linguistic form” (grammar, phonetics), but also “linguistic content” (where, when, what and who to

speak with) [7]. These studies formed the basis of further theories of discourse analysis, which considers the sentence as a unit of language and discourse as the context reflecting the development of thought. Special attention was paid to the fact that the meaning of a sentence depends on the professional and social context, considering the relationship of communication participants. Considering the complexity of the emerging theories, the two major directions of LSP / ESP have been highlighted: linguistic (“functional variety of language that contributes to the successful and adequate communication act of specialists in various subject areas”) and didactic (various means and methods of foreign language teaching within a particular subject area) [8, 9].

A. Dudley-Evans, researching ESP, marked the obligatory steps in learning a foreign (English) language that are dedicated to achieve specific professional goals: preparing to study majors, immersion in the discipline; advanced course [10. P. 158]. The main task in ESP programs is the formation of linguistic competence of students. It is focused on improving communicative language skills, the assessment of the level of knowledge of special terminology, characteristics of grammar and discourse typical of professional work. Successful professional communication contributes to the skills in General English (GE) and the ability to conduct professionally-oriented conversation in a foreign language.

J.M. Swales highlighted the distinctive features of ESP from GE:

- authenticity;
- needs of students;
- scientific basis;
- the restrictions in the use of linguistic structures;
- limiting the subject matter of the texts [11].

These features of ESP are closely related to the concept of “subject area”, which implies the capability of the communication parties to apply a limited set of linguistic units determined by the particular profession.

Domestic theory of professionally-oriented learning a foreign language began its development in the 1970s of the 20th century in the works of E.P. Komarova, T.S. Serova, Z.M. Tsvetkova, L.I. Chaurskaya. This period is associated with the development of individual elements of the professionally-oriented teaching a foreign language at higher institutions: development of reading skills with professionally oriented literature; the development of skills of oral communication on the basis of specialized texts. In their works, the authors focused especially on the development of skills of professionally-oriented reading, allowing you to expand the horizons of learners in terms of their future careers and increase interest in learning a foreign language. Professionally oriented higher education, from the point of view of T.S. Serova, is “the primary means of acquiring, deepening and improving students’ professional knowledge” [6. P. 11].

For quite a long period of time, the primary mission of foreign language teaching was teaching to read specialized texts for practical use of a foreign language. However, in the 1990s, while enlarging international contacts of Russia, there was a change in the goals of learning a foreign language at high school. At that moment a foreign language came to be considered as a means of communication of specialists of different countries. For that purpose, non-linguistic faculties of universities focused on the development of all kinds of speech activity taking into account specifics of future profession: reading, writing, speaking, and listening, following the basic requirement of language teaching methodology of the time – relationship of the learning process with real practical communication.

A further surge in the theory of formation of professional foreign language communicative competence of future specialists was caused by the substantiation of a general theory of communicative approach to training by E.I. Passov, which was focused on the formation and development of the ability to read, write, speak and understand professionally-oriented foreign language speech. In other words, the purpose of foreign language teaching was to teach how to solve communicative tasks using special language. The difference in the interpretation of the concept “professionally-oriented foreign language teaching”, in relation to the process of teaching a foreign language at non-linguistic higher educational institution of earlier studies (1970s–1980s) is significant: the transition from learning professional vocabulary and terminology, reading specialized texts to the formation of creative personality of a future specialist with an active attitude, able to correctly apply the language skills in successful self-realization in professional activities [12].

Conceptually, the notion of professional foreign language communicative competence by V.N. Novoselov was enlarged by the need of complex study of the subjects that constitute the compulsory and the elective part of the professional cycle, completed with professional and research orientation in the process of foreign language education at the university. In practice, it is the ability to implement professional and scientific research activities in a foreign language [4].

However, changes of socio-economic and political situation in the world entail a change in requirements to the modern specialist, and, consequently, the requirements for foreign language education at the university. The scientific literature of the 21st century provides a new interpretation of the concept “professional orientation”, referring to learning a foreign language. For example, professional orientation of education means not only the content of the study materials, but professional orientation of activities (operations and methods of forming the professional skills), i.e. a foreign language in this context is both the object of learning and important professional discipline with the means of formation of professional skills. Exten-

sion of professional orientation of higher education is possible with the integration of the discipline “Foreign language” with the majors [3].

The main objective of a professionally-oriented training is active introduction of multi-disciplinary relationships in the educational system of the higher school and using a foreign language as a means of acquiring the necessary knowledge for the formation of professionally significant skills [13. P. 39].

In the new paradigm, when integrated subject-language teaching reinforces its positions, the role of the discipline “Foreign language” in the system of higher education is fundamentally changing. In this situation, once an isolated interpretation of the concept of “language learning” transforms to “integrated subject-language learning” – a fundamentally new construct designed to solve the problems of the modern system of higher education: parallel study of a foreign language and the major, which contributes to a more successful enrichment of the both, as well as the simultaneous use of native and foreign languages, allowing to master consciously new linguistic and professional knowledge and competencies [7].

The idea of integrated education is being successfully developed in foreign pedagogical science for the last decades. Scientists, representatives of European universities, who laid the theoretical foundations of subject-language teaching (Content and language integrated learning – CLIL), such as David Marsh, Oliver Meyer, Victor Pavon, etc., proposed the method (1994) of “object-language integrated learning”, which involves educational content focused on two subjects. In other words, this is the parallel process of learning language and gaining content [14–20]. Subject-language integrated learning is characterized by the study of the discipline (units of a discipline) in a foreign language, which allows one to simultaneously realize the two-way trend: the study of a foreign language and the study of the discipline.

This method of learning, according to T. March, includes a number of aspects:

- cultural – understanding culture of other countries; development of cross-cultural communication skills;
- social – preparing for a possible internationalization and the possibility of obtaining an internationally recognized certificate;
- language – development of communication skills; increase of interest in the study of native and foreign languages; practical application of a foreign language;
- subject – comprehensive study of the subject; the study of specific subject terminology, increasing the motivation to learn [16].

According to D. Coyle, CLIL system is based on the principle of “4C”: content (content component), communication (communicative component), cognition (cognitive component), culture (cultural component) [Ibid.]. *A content component* defines the goals, objectives and themes of the

development of the subject. *The communicative component* is represented by a triad, which considers language as a tool of cognition (language of learning), communication (language of communication), the object of study (language through learning). *The cognitive component* involves the creation of learning environments that stimulate the cognitive development of students. *The cultural component* is focused on expanding the horizons of students, acceptance of the culture of other countries and awareness of their identity.

The ideas of integrated subject-language learning are just at the beginning of their development in the domestic pedagogical science. Thus, several studies have been conducted under the scientific supervision of L.L. Salekhova, which are mainly focused on bilingual education. The main purpose of introducing CLIL is the development of students' cognitive skills, and skills in a foreign language, along with native one, is a means of cognitive activity in the mastery of professional (substantive) knowledge. The author identifies a number of principles of interdisciplinary integration: integrability of bilingual education of a subject in the general education curriculum; the focus of bilingual education on mastering the discipline of non-linguistic cycle; the use of two languages in the process of development of subject knowledge; the unity of speech and thinking activities in a foreign language [7].

Nowadays, there appear research works on the implementation of CLIL at universities of a technical profile (E.G. Krylov, D.Yu. Burenkova, etc.) that define the content of competencies (including characteristics of their future profession), described in two blocks: professional and linguistic. In addition, the authors have identified the core content, learning tools and tracking the success of implementation of an integrative bilingual learning of professional disciplines and a foreign language at a technical University. The basic principles developed by the authors of the concept are: increasing the motivation of students to engage in educational and professional activities; integration of content at all stages of education; cognitive development and communication skills of students; contextual conditionality of educational material; problem solving [8].

After an express-diagnostics research at Voronezh State Technical University it was found out that the 2–3 year students, participating in the ascertaining experiment, who recognize the importance of interdisciplinary integration, including the motivational component make up 49.8% (value attitude to professional activities, the need to achieve success in the engineering profession), the cognitive component – 38.7% (awareness of perception of professional knowledge in the context of future professional activity, independence, and depth of judgment), connotative component – 29.4% (development and self-education in the field of profession), the reflexive component – 17.9% (awareness of being a professional).

The interpretation of the data obtained confirms that motivational component is much more developed than components of interdisciplinary

integration. This means that students realize the importance of obtaining professional knowledge, including foreign language skills, however, the low level of professional knowledge confirms the need for the preparation and conduct of the educational experiment on implementing the model of the integrated subject and language teaching at the University.

Conclusion

Thus, the results of ascertaining the experiment showed that the interdisciplinary integration, including language training profession, is based on the achievements of the domestic psychology, pedagogy and methodology. This direction develops in accordance with the requirements of the FES HE referring to interdisciplinary coordination and integration of subject-language teaching at a university.

Comparing CLIL ideas presented in the research of domestic scientists with the basic conceptual terms, actively developed and implemented in the European theory and practice, we can conclude that they are based on such fundamental principles as CLIL integration of language-subject content learning; the use of foreign language as a means of mastering the core discipline; the development of cognitive activity of students; improvement of communication skills. However, in the works of domestic researchers, the introduction of CLIL described as a necessity associated with improving the quality of higher education and the increasing role of the national languages of subjects of the Russian Federation, which alongside with official language are used for intensification of educational process in the study of professional disciplines, which contributes to the optimization of the process of preparing students for professional activity in the process of integrating Russian higher education into the world educational space.

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ТЕОРЕТИЧЕСКИЙ КОНТЕКСТ ИНТЕГРИРОВАННОГО ПРЕДМЕТНО-ЯЗЫКОВОГО ОБУЧЕНИЯ В ВУЗЕ

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Аннотация. Представлен ретроспективный анализ основных отечественных и зарубежных научных работ, посвященных проблеме интегрированного, профессионально-ориентированного и предметно-языкового обучения, послуживших основой для развития идеи интегрированного предметно-языкового обучения. Авторы анализируют сходства и различия данных видов обучения, описывают цели образовательного процесса в зависимости от выбранного вида обучения, а также адекватные им задачи на основе не изолированного языкового обучения, а предметно-профессионального с учетом межпредметного взаимодействия. Представлен обзор современных психолого-педагогических исследований по проблеме внедрения интегрированного предметно-языкового обучения в отечественной и зарубежной практике преподавания в вузе. Рассмотрены научные основы внедрения интегрированного предметно-языкового обучения в неязыковых вузах, основанные на исследованиях отечественных лингвистов, педагогов, психологов, методистов. Анализируется проблема междисциплинарной интеграции в системе высшего образования РФ и предложенные в современной научной литературе модели интегрированного обучения иностранным языкам в контексте будущей специальности, отражающие основные направления развития современного российского высшего образования. Методология исследования основана на теоретических методах (анализ, сравнение, синтез, обобщение). Основные результаты проведенного исследования заключаются в аргументированных выводах о сходствах, различиях педагогических подходов в реализации интегрированного предметно-языкового обучения в отечественной и зарубежной научных школах.

Ключевые слова: интеграция; профессионально-ориентированное обучение; интегрированное предметно-языковое обучение; междисциплинарное взаимодействие; LSP; ESP; GE.

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