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Subject-Based Speaking as a Method for the Development of Foreign-Language Professional Competence Among Students

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Abstract. The subject of the article is foreign language professional training of future teachers. The research is devoted to substantiation of Subject-Based Speaking method, which contributes to the development of foreign-language professional communicative competence among university students. The article is aimed at analyzing the effectiveness of using this method in foreign-language professional training. Research methods include study of psychological, pedagogical and methodological literature, observation and interviewing of the experiment participants, analysis of the experimental results. The article gives a detailed description of the stages, requirements, properties, and forms of training used in the proposed method. The results of the study can find application in practice of foreign-language training not only for future teachers, but also for other specialists, since Subject-Based Speaking method is focused on developing the ability to use a foreign language for professional purposes.

Conclusion. Subject-Based Speaking is an effective method used for developing foreign language professional communicative competence, which helps to motivate students to learn a language, their willingness to communicate in a foreign language increases, and students demonstrate a higher level of foreign language professional communicative competence.

Keywords: foreign language training, foreign language professional communicative competence, professional orientation, educational process, teachers.

Research area: pedagogy.

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Subject-Based Speaking как метод развития иноязычной профессиональной компетенции

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Аннотация. Предмет статьи – иноязычное профессиональное образование будущих учителей. Исследование посвящено обоснованию метода Subject-Based Speaking, способствующего формированию иноязычной профессиональной коммуникативной компетенции студентов. Это тема исследования. Статья направлена на анализ эффективности использования данного метода в иноязычной профессиональной подготовке. Методы исследования включают изучение психологической, педагогической, методической литературы, наблюдение, опрос участников эксперимента, анализ результатов эксперимента. В статье подробно описаны этапы, требования, свойства и формы обучения, используемые в рамках предлагаемого метода. Результаты исследования могут найти применение в практике обучения иностранному языку не только будущих учителей, но и других специалистов, поскольку метод Subject-Based Speaking ориентирован на развитие умения использовать иностранный язык в профессиональных целях.

Subject-Based Speaking — эффективный метод, используемый для развития иноязычной профессиональной коммуникативной компетенции, благодаря которому у студентов появляется мотивация к изучению языка, повышается готовность к общению на иностранном языке, также студенты демонстрируют более высокий уровень сформированности иноязычной профессиональной коммуникативной компетенции.

Ключевые слова: обучение иностранному языку, профессиональная коммуникативная компетенция по иностранному языку, профориентация, учебный процесс, учитель.

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Introduction

One of the priority areas of the development of higher education in the Republic of Kazakhstan is training of specialists capable and ready for professional communication in a foreign language. In this context, traditional foreign language teaching with an emphasis on traditional vocabulary, grammar and translation methods demonstrates its applied inefficiency.

English language proficiency plays an important role at the national and personal

levels, contributing to national development and providing access to economic, social and educational opportunities (Zhetpisbayeva et al., 2016: 63). Foreign language professional communicative competence, i. e. an ability and practical readiness to use a foreign language as a means of professional and personal communication, for research and academic purposes, and to achieve the level necessary for practical application in future professional activities, has become one of the prerequisites for a successful career of a future specialist and the main goal of teaching foreign languages at high school (Perna et al., 2015). Foreign language competence is an important tool for obtaining knowledge and a significant advantage in the competitive world (Perez et al., 2016: 488). Moreover, a foreign language serves not only as a means of communication, but also as a means of forming professional competencies (Dmitrichenkova et al., 2017: 577).

As practice shows, cases when students are deficient in actual professionally specialized immersion in the studied foreign language are quite common. Students studying English, translating texts of professionally-oriented subjects, memorizing professional terminology without its further use in speech, have a low level of motivation. There are also frequent cases when students are afraid to make mistakes while speaking and are not ready to produce speech utterances on their own (Byrdina et al., 2018: 11). Many students admit that they do not know how to communicate effectively in English, especially on professional topics (Kovalyova et al., 2016: 153).

Changes in the requirements to ensure an adequate level of foreign language skills, in particular, apply to teachers and their professional training in the field of foreign language teaching. This is the imperative of the time and one of the most important strategic goals of the language policy of Kazakhstan, according to which since 2019 the history of Kazakhstan is to be studied in Kazakh, world history in Russian, and since the 5th grade students are going to learn specific terminology of computer science, physics, chemistry and biology in English, gradually preparing to study the above disciplines in English in high school. A full

transition to teaching of the four disciplines in English is planned to be completed by 2023.

Thus, foreign language communication contains many aspects of teachers' professional activities and contributes to implementation of the following communicative functions: teaching in a foreign language, exchange of modern professionally relevant information, establishment of professional interpersonal relationships, interaction and cooperation. Thus, formation of teachers' foreign language communicative competence is a prerequisite for achieving various professional tasks. Meanwhile, the process of forming teachers' foreign language communicative competence aimed at ensuring professional interaction in a foreign language, requires further study.

In our study, we propose the **Subject-Based Speaking (SBS)** method that can solve existing problems and increase interest of future teachers in English, since it allows them to practically apply foreign language skills directly in their subject area, to see the need for a foreign language for a future career.

The aim of our study is to analyze the effectiveness of using Subject-Based Speaking in the process of foreign language teaching of future teachers at university.

Implementation of this technology allows teachers to integrate the language and subject areas, to acquire necessary lexical and speaking skills within their subject area in a foreign language and social communication skills.

Given the described situation, we assume that using Subject-Based Speaking in foreign language professional training will: a) improve students' attitude towards a foreign language for professional purposes and reduce their fears of overcoming the language barrier, b) show students practical possibilities of applying foreign language skills in their subject area, c) prepare students for further perception of specialized disciplines in a foreign language. This allows us to test our **hypothesis** using various tools in our experiment.

Methodology

After analyzing scientific articles published in peer-reviewed foreign journals, we have identified three main aspects in the is-

sue of modern technologies for the formation of foreign language professional competence among students of pedagogical specialties:

- study and consideration of needs of the educational system in the field of foreign language education;
- need to integrate the professional component into foreign language education, in particular in the field of natural sciences;
- experimental proof of the effectiveness of the proposed technologies for the formation of foreign language professional communicative competence and the study of attitudes of students and teachers to the applied technologies.
- Z. Babić writes about the need for a communicative focus in foreign language education, emphasizing the great discrepancy between requirements in the updated educational documents and the still traditional approach to teaching English in universities (Babić, 2016). The predominance of traditional methods of teaching a foreign language is also noted by M. Menke and K. Paesani in their studyanalysis of teaching materials implemented in the process of forming students' foreign language communicative competence (Menke, Paesani, 2019).

Y. Demir, G. Mutlu and Y. S. Şişman, speaking of the communicative orientation of a foreign language, note difficulties that are caused by the discrepancy between communicative intentions of speakers and their linguistic resources (Demir et al., 2018: 540).

Speaking about the advantages of integrating a professional component into foreign language education, methodologists N. Godzhaeva and T.A. Logunov noted the increase in motivation, the expansion of specialized terminology, the development of foreign language communicative competence among students of Kemerovo State University (Godzhaeva, Logunov, 2015). The works by S. Rezat (Rezat, Rezat, 2017: 4189) and O.G. Byrdina, S. G. Dolzhenko, E. A. Yurinova (Byrdina et al., 2018) are devoted to stimulating the development of students' understanding of a foreign language when studying specialized subjects. Researchers G. V. Denisova and E. A. Redkina, studying the issue of teaching foreign professional communication, speak of the need for a methodology that can help students effectively use existing knowledge, skills, competencies in intercultural professional oral and written communication (Denissova et al., 2019).

Cuban researchers Forteza Fernandez R. F. and Batista Gonzalez M. del C. also reported on the experience of introducing a professional component in teaching English. In the mid-1980s, Cuba launched a five-year communicative foreign language training program so that future medical professionals could fluently communicate in English, working in other parts of the world: for the first three years, students had to study general English, and the last two years – an ESP course (Forteza Fernandez et al., 2019: 26).

It is worth noting another approach which is described by the American researcher D.J. Short. It provides for the creation of favorable conditions for the organization of integrative teaching of the English language and specialized subjects. This is a «sheltered instruction», widely distributed in the USA for more than 20 years in all subject areas and at all levels (Short, 2017: 4237). In the framework of the «sheltered instruction» cognitive problems that underlie the language difficulties of teaching the natural sciences in view of the complex and abstract concepts of this type of discipline were studied. Researchers Roussel S., Julia D., Tricot A., Seller J. also study the issue of cognitive features of foreign language professional training. We agree with their idea that in parallel with the development of professional English, it is necessary to carry out the study of specialized disciplines in English (Roussel et al., 2017: 70).

G.N. Cervetti, J.M. Kulikowich and M.A. Bravo note the abundance of scientific abstract concepts in the natural sciences and suggest their transformation into more specific ones as one of the conditions for the successful implementation of vocational training in the field of a foreign language due to the preference for visual tools and participation in experimental kinesthetic work (Cervetti et al., 2015: 87). D.J. Short adds to this arsenal of explanations with gestures, simplification of the reported information, modeling and other methods of

providing important information (Short, 2017: 4240).

In countries where the language of instruction is English, foreign students are provided with mandatory preliminary language training to study specialized subjects in a foreign language. For instance, in the Griffith University of Australia language training is conducted in 4 areas: Language and Communication for Business and Commerce, Language and Communication for Sciences and Language and Communication for Arts and Social Sciences (Fenton-Smith et al., 2017: 9).

The fact that a foreign language acts not only as a subject, but also as a means of obtaining information, a mechanism of integration with other subjects, is presented by Kazakh scientists G.O. Tazhigulova, D.N. Assanova, E.A. Uteubaeva, G.K. Tleuzhanova, A.B. Mekezhanova (Tazhigulova et al., 2018) and Russian researchers A. Gizatullina and A. Sibgatullina (Gizatullina, Sibgatullina, 2018).

In the above studies, the authors propose formation of practically applicable skills in English as the main goal of teaching a foreign language in a professional context.

The need to update the content and methodology of teaching a foreign language for professional purpose, in turn, prompted researchers and methodologists to look for effective models, approaches and technologies for the formation of foreign language communicative competence. For example, Q. Wen sees a product-oriented approach as an effective means of increasing foreign language communicative competence (Wen, 2016). M.M. S. Abdallah suggests revising the content and teaching methods of the discipline «Foreign language for special purposes» (Abdallah, 2016). F. W. Foong offers the Stepwise-Stepup Tertiary Science English system for effective acquisition of a scientific foreign language (Foong, 2018). Researchers P. Sobkowiak, M. Pawlak, A. Mystkowska-Wiertelak consider the effectiveness of the case study method in a three-stage model of teaching business English (Sobkowiak, 2017).

The study of ways to increase the effectiveness of the formation of foreign language communicative competence of students is

carried out taking into account their specialization. So, S. V. Dmitrichenkova, V. A. Chauzova and E.A. Malykh reveal the applied potential of modern programs for teaching translation to future engineers in the field of information technology (Dmitrichenkova et al., 2017). Zh. G. Shaikhyzada, E. A. Kostina, A.E. Kubeyeva and B.A. Zhetpisbayeva noted the importance of the issue of training qualified engineers who are able to use a foreign language in their professional activities. Many years of experience in teaching foreign languages to students of engineering specialties revealed some difficulties: lack of continuity in teaching foreign languages between the levels of instruction (school-college-university); lack of uniform requirements for the definition of goals, objectives and subjects for the development of speech skills, lack of unified language requirements for special purposes (Shaikhyzada et al., 2016: 97).

English for Special Purposes (ESP) has a special aim: to use it as a means of daily communication in scientific fields. Thus, F. W. Foong allocates the following aim for scientific English (SE): for observation, reasoning, evaluation, presentation of analytical data (Foong, 2018: 537).

Formation of communicative competence in teacher training was reflected in the work by researchers I. V. Ilyina, N. A. Tarasyuk, O. M. Novikova, N. S. Gribova. They proposed a strategy aimed at phased accumulation of foreign-language models and samples and the development of communicative imagination (Ilyina et al., 2018: 701). L. N. Ponomarenko, I. S. Zlobina, E. O. Galitskih, O. S. Rublyova note that the goal of teachers' education is not only training, but also developing their linguistic personality, developing the ability to understand and accept various cultural settings, and forming the skill of intercultural dialogue (Ponomarenko et al., 2017: 90).

As we see, the problem of finding and implementing new technologies for the formation of students' foreign language professional communicative competence is widely covered in foreign and Kazakhstani studies. Nevertheless, it should be noted that the proposed technologies do not fully meet the goal of foreign

language training of future biology teachers in Kazakhstani universities, which consists in mastering a foreign language as the language of teaching a subject, a means of obtaining professionally relevant information, a means of communication in personal, professional plans, a means of communication in research.

The following **methods** were used to solve the tasks of the study: the study of psychological, pedagogical, methodological literature, interviewing teachers who teach biology in English, as well as students of the educational program «Biology», a pedagogical experiment, statistical data processing.

Formation of foreign language communicative professional competence among students of higher education via Subject-Based Speaking is based on a combination of three approaches: communicative, competence-based approaches and situational conditioning, which are reflected in the works of Kazakhstani scientists S.S. Kunanbaeva (Kunanbaeva, 2014), Russian scientists E.I. Passov (Passov, 1991), I.A. Zimnyaya (Zimnyaya, 2004). These are the approaches our study has been based on.

The communicative approach is based on the ideas that: a language acts as a means of communication in real or artificially created life and professional situations; interconnected training is provided for all types of oral and written communication; authentic materials and non-adapted texts are used; the teacher implements the principle of situational conditioning, that is, recreates situations that students may encounter in real professional life (Byrdina et al., 2018: 11).

The basis of **the competence-based approach** is: willingness and ability to communicate fluently on various topics; free use of vocabulary in speech; independence in the construction of a speech utterance; tolerance, willingness and ability to conduct dialogue with peers and teachers, to collaborate, to reach mutual understanding and solve joint problems; strengthening the importance of students' practice and independent work in the educational process.

Speaking of **situational conditioning**, E. I. Passov gives the following definition of the situational nature of speech: this is «its spe-

cial property manifested in the fact that speech units in the semantic and temporal parameters always correlate with the situation and create the potential context of a certain range» (Passov, 1977). That is, communication participants build it in accordance with the range of the proposed situation.

The result of training will no longer be the sum of knowledge, skills, but the ability of students to find a way out in the proposed problem situations within the framework of future specialization, the ability to solve communicative professional tasks in typical and non-standard situations.

Discussion

In domestic and foreign studies, foreign language communicative professional competence is presented as the ability to realize one's communicative speech behavior based on linguistic, sociolinguistic, specialized and country-knowledge, in accordance with various professional tasks and communication situations (Byrdina et al., 2018: 12).

The development of foreign language professional competence requires accumulation of professional, cultural and sociolinguistic information. Thus, the teacher faces a task: to teach students, to provide them with strategies and techniques for working with written, audio/video and electronic information, so that, under favorable conditions at the lesson, encourage students to use the accumulated knowledge, skills, abilities and competencies in practice. This is exactly what Subject-Based Speaking method is aimed at.

Scientific and methodological literature analysis has shown that professional orientation of foreign language training of future specialists can be implemented through the use of Content-Based Active Speaking Technology (Byrdina et al., 2018), Task-Based Learning and Teaching (Du, 2017), Problem-Based Learning (Merrit et al., 2017).

Researchers O. G. Byrdina, S. G. Dolzhenko, E. A. Yurinova offer Content – based Active Speaking Technology (CAST) for solving specialized communicative tasks. CAST is defined as a method of active immersion in the language environment, in which «students be-

gin to communicate in a foreign language with a practical purpose», and tasks «are focused on the content, and not on the form» (Byrdina et al., 2018: 13).

Chinese scientists X. Du, K. Zhao, Y. Ruan, L. Wang, X. Duan present their own method of building foreign language communicative competence based on increasing motivation to learn a foreign language through practical tasks through Task-Based Learning and Teaching. It was found that Danish students stopped perceiving the Chinese language as difficult as they thought before the start of training (Du, 2017: 10).

Solving professional communicative tasks allows shifting the emphasis from memorizing information directly to its application. In fact, this is how authentic communication works: language is used as a means of exchanging information with the additional advantage of increasing knowledge in one's professional field (Cuenca, 2015: 1783).

Problem-Based Learning is also an example of such methods. Authors J. Merritt, M. Lee, P. Rillero and B. M. Kinach define problem-based learning as a method that promotes development of competencies that are important for a 21st-century specialist through solving problems, application and integration of knowledge in real life conditions (Merrit et al., 2017).

We can also agree with the opinion of the Taiwanese scientists Syh-Jong Jang and Yahui Chang, who studied the impact of the use of pedagogical technologies on the training of physics teachers, that educational technologies will gradually begin to acquire an increasing role, since their application in educational environments is closely related to the achievements of students in learning (Jang, Chang, 2016: 107).

The techniques given above indicate that speech communication should be based on professionally directed activities, reflecting specific features of students' future professional activities.

Based on the analysis of technologies that are similar in their purposeful and substantive focus to the subject of our study, we offer Subject-Based Speaking and define it as a combination of speech and non-speech conditions created at the lesson so that students use speech action in accordance with the professional communicative task.

The name of the presented method is based on the terms *subject* and *speaking*. The main function of SBS is to update knowledge, skills, abilities and competencies in a situation that is as close as possible to real life professional (i. e. subject) communication.

Subject-Based Speaking allows students to solve professional communication tasks offered by the teacher. In Subject-Based Speaking, students try to find options for solving communicative professional tasks set by the teacher, so that they are immersed in the language professional environment, and students begin to communicate in a foreign language for a professional purpose.

Subject-Based Speaking method differs from the methods of the traditional training system, because the tasks are concentrated not on the form, but on the content of the proposed professional situation.

Having received the task to solve the situation within the framework of Subject-Based Speaking, a student gets the opportunity to «live» through a communicative professional situation, expanding their knowledge with additional sources and additional extracurricular preparation.

For the effective formation of foreign language professional competence, Subject-Based Speaking tasks have to meet the following **requirements**:

- they should include a <u>preparatory</u> <u>phase</u> aimed at understanding the purpose and accumulation of the required information;
- participants are given <u>certain professional roles</u>, which they are going to perform in a foreign language;
- the <u>professional problem</u> in the situation should correspond to the level and interests of students;
- they should contain the final stage of summing up, evaluating the effectiveness of communication and reflection;
- <u>-</u> solution to the problem raised in the situation should be open in nature, cause discussion and further research.

Subject-Based Speaking aimed at developing foreign language professional competence of students has the following **properties**:

- 1. Parallel formation of professional competencies. A foreign language, as a means of developing communicative and intercultural competencies, also allows students to develop analytical, creative, reflective skills, self-control skills, information, research, and pedagogical competencies.
- 2. Interdisciplinarity. To implement effective professional communication, one needs to have a certain amount of knowledge in the major subject. Undoubtedly, the applied use of professional knowledge in a lesson of professionally-oriented foreign language may cause difficulties and require additional preparation. Nevertheless, students are aware of the importance of a foreign language in their future professional activities, which will provide them with additional motivation, as well as enrich their vocabulary, a set of speech tactics and strategies.
- 3. Three-level organization of SBS. The SBS training and organization method consists of three stages: preparatory, executive and final.
- 4. Consideration of the thinking development level. Exercises of Subject-Based Speaking should be developed in accordance with the level of complexity. As for situations proposed by our method, they help students to improve their level with different initial levels, and are also closer to the natural professional conditions.
- 5. Variability. Teacher's activity often requires a spontaneous response to a problem and solution of various issues and conflicts. While using Subject-Based Speaking situations a teacher should provide their participants with the possibility of variability: learn to adequately respond in unexpected situations, anticipate the possibility of changing planned events, instantly activate and apply existing communicative and professional knowledge and skills, apply compensatory competence in case of unforeseen changes.
- 6. Scaffolding. Subject-Based Speaking tasks provide professional-oriented content that can be accessed using the scaffolding technique, i. e. «by dividing a task or activity into

manageable steps and using appropriate skills and strategies to successfully complete various steps» (Cuenca, 2015: 1783). Scaffolding is provided in the process of verbal interaction: working in pairs or groups. A. Walqui also notes that the language, cognitive and academic levels of students increase if students are given opportunities to interact in pairs or groups (Walqui, 2006: 207).

Basing on the above properties and the structure of SBS, we distinguish the following stages of SBS, aimed at the formation and improvement of foreign language professional communicative competence:

- 1. Preparatory (cumulative) stage.
- 2. Practical stage.
- 3. Analytical stage.

Table 1 provides a description of each step. Table 2 presents examples of Subject-Based Speaking situations.

54 students of the Faculty of Biology and Geography of Karaganda Buketov University and 48 students of the Higher School of Natural Sciences of Pavlodar Pedagogical University took part in the experiment, conducted in three stages: preparatory, main and final stages.

I. Preparatory stage

The experiment on the use of Subject-Based Speaking method in the learning process was carried out in the academic year 2018–2019 in the framework of the discipline «Professionally-oriented foreign language» for students of the educational program «Biology» of Karaganda Buketov University and Pavlodar Pedagogical University.

Taking into account recommendations of N.D. Galskova and N.I. Gez (Galskova, Gez, 2005) and the results of our study, we have identified the low, medium and high levels of formation of foreign language professional competence among students.

Low (reproductive) level:

- students have no desire to solve professional communicative tasks, they are passive in the classroom;
- students do not see benefits of a foreign language for their future professional activities;

Table 1. Stages of work with SBS

Preparatory stage	Objectives: 1) activation of existing knowledge and experience; 2) motivation and interest in the perception of new information; 3) receipt, assimilation and analysis of new information						
	Means: audio, video materials, print sources and Internet resources						
	Types of work: Language exercises (using incentives for real communication), conditional speech, speech: imitative, substitution, transformational, reproductive exercises						
	Levels of thinking development: knowledge, understanding						
	Objective: application of acquired knowledge in a foreign language professional situation						
	Strategies: Speech Strategies and Tactics						
Practical stage	Types of work: Conditional speech speech exercises Role-playing, business games, simulations						
	Levels of thinking development: application, analysis, synthesis						
	Objective: analysis of the effectiveness of the tools and strategies used						
Analytical stage	Types of work: creative (oral and written)						
Suge	Levels of thinking development: assessment						

Table 2. Examples of Subject-Based Speaking developed for the 3rd year students of the educational program «Biology»

Section	Description of a subject-based task
What is Biology?	Research information on biology, living and non-living things, characteristics of living things. Alice, the virtual voice assistant can understand, think, respond, answer the questions and maintain a dialogue. Are all these characteristic features of living things or is it still non-living?
The Cell	As a group distribute the roles: head of the group (1), secretary (1), botany experts (2–3), zoology experts (2–3). The group conducts research on the information needed about cells. Then experts prepare photographs of cells of an animal and a plant to present them to their opponents. Think of possible questions you might get from the audience. Be ready to answer them. Be ready for a discussion
DNA	In 1948 the chemist Ervin Chargaff began using paper chromatography to analyze the base composition of DNA from a number of species. The table given by your teacher shows the types of results may be interpreted to support Watson and Crick's double-helix hypothesis. What other interpretations could be given?
Evolution	Besides the Darwin's theory of evolution there are plenty of other theories of evolution. One of them is the space theory. Give ideas why the human species might develop from humanoids

- student work productivity is less than
 % of the planned;
- students have poorly developed logic, correctness and accuracy of speech;
- a poor supply of active vocabulary is traced, and the core (subject) component of foreign language competence is not formed;
- there is a low level of proficiency in the grammatical and lexical means of the language.

Medium (reproductive and productive) level:

- students have a desire to solve professional communicative tasks, from time to time there is a need for foreign language communication on topics covered;
- students can conduct operations of analysis and synthesis, generalization;
- students can partially switch from intellectual to communicative tasks;
- students have the ability to situationally engage in foreign language communication

High (productive) level:

- students express the need for the systematic implementation of communicative tasks:
- students express a need for knowledge of a foreign language in their future professional activities;
- students possess the ability to switch from one type of activity to another is observed;
- students can independently analyze, generalize, draw conclusions, work productively;
- students can clearly express their point of view, enter into foreign language communication:
- students have formed speech behavior, communication skills.

To identify the initial level of formation of the foreign language communicative professional competence of students, control testing was conducted.

While conducting training with the use of SBS, ongoing and final testing was carried out, which helped us to observe the process of forming skills, developing skills and assessing the correctness of the chosen method. Control and ongoing testing was carried out in the form of role-playing games and simulations on topics relevant to the current study.

The theme of the game was «The Cell». Students were divided into groups according to the following roles: group leader, secretary, botany experts, zoology experts. Students in groups were asked to first study printed and virtual sources about cell types, pick up photos of animal and plant cells. Students were supposed to prepare at home using all possible resources. At the lesson, the groups showed each other photos and guessed the types of cells. The results of the control testing are reflected in Fig. 1.

Having summarized the results of the findings of an ascertaining diagnosis of the initial level of formation of foreign language communicative professional competence, we have made the following conclusions:

- 1) for most students, the initial level of foreign communicative professional competence was predominantly low and medium;
- 2) different aspects of communicative professional competence are formed unevenly;
- 3) students have an understanding of the material being studied, motivation to study a foreign language and a desire to communicate in it at the *medium level*;

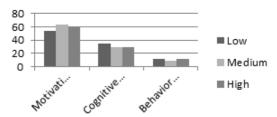


Fig. 1. Results of an ascertaining diagnosis for identifying the initial level of formation of foreign language communicative professional competence

4) at the *low level* students have formed cognitive activity in the study of a professionally specialized foreign language, specialized and general cultural knowledge, communication skills, ability to cooperate and work together, professional speech behavior in the language being studied.

The ascertaining section demonstrates that students neglected importance of extracurricular preparation for such tasks, missed important facts, and were frightened with a large amount of information discovered on the topic. Almost everyone had difficulty explaining why they attributed this or that photograph to an animal or plant cell and missed politeness. Almost none of the students took into account the non-verbal means of communication. In general, students did not cope with the professional task. We can conclude that at the beginning of the experimental training. foreign language professional communicative competence was not formed, students were not able to cope with the information flow, analvze their behavior and the behavior of the interlocutor.

Based on the results of the incoming diagnosis, we formed 2 control groups of students, consisting of 27 3rd year students of the Faculty of Biology and Geography of Karaganda Buketov and 24 3-year students of the Higher School of Natural Sciences of Pavlodar State Pedagogical University, studying under the program «Biology» (educational), and 2 experimental groups of 51 3-year students of the same educational program. In the experimental group, Subject-Based Speaking method was purposefully implemented for one semester.

II. Main stage of the experiment

The practical implementation of the results on the use of Subject-Based Speaking method was carried out at the lessons of «Professionally-oriented foreign language», as well as through the development and practical application of methodological recommendations on the use of Subject-Based Speaking, based on practical experience with them

At the practical stage, biology students were required to search for necessary additional information and prepare outside the classroom.

During the course, students got used to the stages of work within the SBS, so they did not have difficulties in assessing the result of their own foreign language professional activities. An important result for biology students was an obvious connection of a foreign language with a block of professional disciplines in the language of instruction (Kazakh, Russian), which contributed to a deeper immersion in the studied problem and increased motivation to study the subject.

At the end of the experiment, we provided a final diagnosis, the results of which are shown in Table 3.

The results of the final diagnosis in the control groups have shown that:

- 1) the level of motivation to learn a foreign language has decreased compared to the start of training;
- 2) indicators for cognitive and behavioral criteria increased insignificantly (we believe this was due to the reading of professionally oriented texts);

	Criteria								
Initial levels of foreign language com- municative professional competence	motivational criterion,%			cognitive criterion,%			behavioral criterion,%		
	AD	CG	EG	AD	CG	EG	AD	CG	EG
Low	54	68	12	63	46	12	59	48	8
Medium	34	26	29	29	34	34	29	32	29
High	12	6	59	8	12	54	12	16	63

Table 3. Results of the final diagnosis

Note: AD – ascertaining diagnosis, CG – final diagnosis in the control group, EG – final diagnosis in the experimental group

3) indicators of the behavioral criterion slightly increased (this is due to the fact that little attention is paid to the features of speech behavior in traditional education).

The results of the final diagnostics in the control groups indicate that traditional training helps to «average» the level of formation of foreign language communicative professional competence.

In the experimental groups:

- 1) indicators for all the criteria for the formation of foreign language communicative professional competence have increased significantly;
- 2) the growth of indicators of high and medium levels of formation of foreign language communicative professional competence is slightly higher, which is explained by using Subject-Based Speaking method.

After the experiment, a survey was conducted among students to identify their assessment of the Subject-Based Speaking method, its impact on students' attitude, motivation and involvement. It was offered only to students of the experimental group and consisted of pre-experimental questions, and was supplemented by several questions on clarifying the students' recently acquired experience. Thus,

students of the experimental group were asked questions about capabilities and disadvantages of this method, its usefulness, their willingness to participate in discussions, what they learned and what competencies they acquired. The questionnaire was supplemented by a self-assessment of foreign language professional competence of students with the options «improved» / «remained the same level» / «decreased»). An open-ended question was also added, where students identified the advantages, disadvantages and problems of this type of work. The results of closed questionnaires are presented in Table 4.

In the preliminary questionnaire, there were no significant differences in the responses of students from the AC and the EG. As for the post-experimental questioning, we did not find any special differences in answers to the 2nd question. But in answering questions regarding changes in students' attitudes towards the studied discipline, we noted a clear increase in the percentage of acceptance (75 % in the experimental group after the experiment) compared to 58.3 % of the respondents in the pre-experimental survey. Also in the EG, there was a marked increase in the assessment of their level of English proficiency that corresponds to

Table 4. Results of pre-experimental and post-experimental closed questionnaires of students

Questions		AD (average result,%)	CG (%)	EG (%)
	Very necessary	25	58.3	75
for your future professional activity? 2. When is it possible to introduce conducting specialized disciplines in English at your univer-	Necessary	54.15	33.33	25
	More likely than not	12.5	8.33	0
	Definitely not	12.5	0	0
	Already possible	16.7	25	33.33
specialized disciplines in English at your univer-	In 3–5 years	70.8	58.3	50
	In the distant future	4.1	8.3	8.3
	More likely than not 12.5 8.33 0 Definitely not 12.5 0 0 Already possible 16.7 25 33.33 In 3–5 years 70.8 58.3 50 In the distant future 4.1 8.3 8.3 Never 8.3 8.3 8.3 Definitely yes 0 0 8.3	8.3		
	Definitely yes	0	0	8.3
3. To what extent does your level of English profi-	Rather yes	20.8	33.33	58.3
ciency correspond to Professional English?	Rather no	62.5	50	25
	Definitely not	16.6	16.7	8.3

Note: AD – ascertaining diagnosis, CG – final diagnosis in the control group, EG – final diagnosis in the experimental group

Professional English (58.3 % in the EG compared to 33.33 % in the AC): students of the EG considered it higher compared to the beginning of the experiment.

As the results of the open questionnaire of students show, they are attracted to active methods and technologies that offer them to think, find a way out from situations, and independently understand facts, events, and reality phenomena. 65 % of the students surveyed expressed their interest in learning English for professional purposes, 33 % showed some interest in learning English, and 2 % showed a lack of interest. To determine the value of English in the profession, students assessed their knowledge of a foreign language as: 1) a means of communication; 2) a means of personal development; 3) one of the ways to increase professional growth and development of professional competence; 4) the command of time; 5) a tool for entertainment and adaptation to modern information technologies; 6) a means for further study abroad.

A survey was also conducted among the teachers who took part in the experiment. 3 participating teachers were asked for their opinions regarding their own assessment of the applicability and effectiveness of this type of work. The questionnaire consisted of both closed and open questions, in open questions teachers were asked to highlight the pros and cons of using this method. The survey results are reflected in Table 5.

Summarizing the attitude of participating teachers, the following conclusion can be

drawn. None of the respondents expressed a clearly negative attitude towards it. However, most teachers note that they do not have enough necessary information and educational resources. Moreover, all teachers noted the need for more time to study thematic sections. They find the Subject-Based Speaking method a motivational-stimulating and professionally-satisfying effective means of developing students' knowledge of foreign languages. The participants recognized the need to develop specialized teaching aids containing this method, and the corresponding methodological and terminological equipment.

Experimentally, we have identified the following advantages of this method:

- overcoming the fear of mistakes and the language barrier;
- development of colloquial speech, since students learn without fear to speak fluently in a foreign language according to the proposed situation;
- increasing the motivation of students, as they see the applied value of a foreign language for their future career.

Conclusion

The language policy of Kazakhstan at the moment is aimed at its integration into the world community, which is reflected in the policy of trilingualism, which implies that the Kazakhs speak Kazakh, Russian and English, since Kazakh is the state language, Russian is the language of international communication, and English acts as language of

Table 5. Positive and negative aspects of Subject-Base	a Speaking method
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Positive aspects	%	Negative aspects	%
Increasing motivation to learn and use a for- eign language in a real life professional context	100	Teacher's preparation for organizing a task is required.	66.6
Overcoming the language barrier and fear of mistakes	66.6	Lack of training resources, books. The teacher needs time to search for tasks that correspond to this method, or create them him/herself.	33.3
An interesting form of training for students that increases the level of activity in the lesson and in extracurricular time.	100	The need to increase the time for studying topics.	100
Development of colloquial speech on the proposed professionally-oriented topic.	66.6		

successful integration into the global economic space.

There is a need to train specialists whose professionalism and competitiveness directly depend on the level and quality of foreign language skills, willingness to engage in professional-business communication with representatives of other cultures, and acquire information in a foreign language.

Kazakhstani and international experience in teaching a specialized foreign language proves the need to reconsider the approach to foreign language teaching, adapt it to the specific conditions of the academic profile environment. Obviously, the process of transition to new approaches is labor and time-consuming, but only in this case will the process of professional foreign language teaching be perceived positively and become effective.

Particularly acute is the issue of training subject teachers, in particular, future biology teachers who are able to teach their core subject in English. In this regard, it has become necessary to review existing and create new technologies in terms of improving the quality and effectiveness of foreign language training for future biology teachers.

Foreign-language professional communicative competence of teachers is aimed at the implementation of intercultural professional communication and is formed in the process of co-learning a foreign language and profile disciplines. Being an integral personal characteristic of a teacher, foreign language communicative competence reflects features of his professional activity, ensures effective implementation of the teacher's professional tasks and contributes to successful use of a foreign language as a teaching tool for communicating with colleagues, foreign partners using professional knowledge, skills using the linguistic system, sociolinguistic, sociocultural, pragmatic, discursive and strategic means.

From the discussion given above, we can conclude that there are unresolved issues in our study, we attempted to theoretically substantiate and elaborate a methodological system for using SBS for the development of foreign language professional communicative competence of students, taking into account

the characteristics of their professional competencies.

The aim of our study was to test the effectiveness of using Subject-Based Speaking method in the process of foreign language training of future teachers at university.

Many foreign and domestic researchers are engaged in the search, development and implementation of technologies for the formation of foreign-language professional communicative competence among students. These technologies include Content-Based Active Speaking Technology (Byrdina et al., 2018), Task-Based Learning and Teaching (Du, 2017), Problem-Based Learning (Merrit et al., 2017). All of them help to organize communication based on professional content. Having analyzed the existing technologies of foreign language vocational training, we have proposed the Subject-Based Speaking method.

Subject-Based Speaking method is a foreign language professional training method that allows students to apply foreign language knowledge, skills, abilities and competencies in a professional communicative situation.

In the course of studying the issue of the effectiveness of applying the Subject-Based Speaking method in foreign language professional training, we have suggested that it provides an increase in motivation to learn a foreign language. As shown by the experience of N. Godzhaeva and T. A. Logunov increase motivation occurs due to the integration of the profile component in a foreign language education (Godzhaeva, Logunov, 2015). This is also claimed by the researchers Rezat S. (Rezat, Rezat, 2017) and O. G. Byrdina, S. G. Dolzhenko, E. A. Yurinova (Byrdina et al., 2018).

Moreover, this method allows to apply acquired competencies in communication, forms a culture of foreign language professional communication through the integration of language and subject areas, which is studied in the works by G. V. Denissova and E. A. Redkina (Denissova et al., 2019), Forteza Fernandez R. F. and Batista Gonzalez M. del C. (Forteza Fernandez, Batista Gonzalez, 2019: 26), G. O. Tazhigulova D. N. Assanova, E. A. Uteubaeva, G. K. Tleuzhanova, A. B. Mekezhanova (Tazhigulova et al., 2018) and other researchers.

We have discovered the following properties of Subject-Based Speaking method: parallel formation of professional competences, interdisciplinary nature, three-level organization of SBS, taking into account the level of development of thinking and the element of variability. The work with Subject-Based Speaking method is organized in three stages: preparatory (cumulative), practical and analytical.

Within the framework of the proposed method, we have developed a set of situations that allows applying specialized knowledge in situations of professional communication in a foreign language, theoretically substantiated and experimentally confirmed the effectiveness of using the Subject-Based Speaking complex to develop the required competence.

The goals of using SBS in the classes in the disciplines «Professionally Oriented Foreign Language» and «Language for Special Purposes» are to ensure maximum immersion in a foreign language professional environment using visual aids, audio and video materials, Internet resources, and interdisciplinary interaction; and also to create conditions for the development of professional foreign communicative competence, the ability to accept, adequately evaluate and respond positively to the proposed behavior.

To create SBS, selection of typical speech situations of professional communication in the field of biology is necessary. For the successful formation of target competence, each selected situation should take into account the following:

- it should have the preparatory stage necessary for the presentation of the task and the accumulation of professional, background and cultural information;
- communication participants are assigned specific roles;
- the professional problem raised in SBS should correspond to the language level of students at this stage;
- it should contain the final stage at which the results are summed up, the effectiveness of communication is evaluated.

An experimental verification of the effectiveness of the method used was carried out at the base of the Faculty of Biology and Geogra-

phy of Karaganda Buketov University and the Higher School of Natural Sciences of Pavlodar Pedagogical University. In total, 102 students took part in the experiment.

Probation of SBS method, aimed at the formation of a foreign language communicative professional competence of students of the educational program «Biology», has confirmed its effectiveness in the classroom in the framework of the conducted experiment.

The preparatory stage of the experiment has become the foundation of the upcoming training.

The results of the experiment clearly demonstrated the effectiveness of using SBS for the development of foreign language professional communicative competence. Thanks to the phased work using SBS, we received not only an increase in the level of formation of foreign language professional communicative competence, but also increased students 'motivation, their autonomy, and contributed to the development of students' thinking and their general erudition.

Experimentally, we have identified the following advantages of this method:

- overcoming the fear of mistakes and the language barrier;
- development of oral speech, since students learn without fear to speak fluently in a foreign language according to the proposed situation;
- increasing the motivation of students, as they see the applied value of a foreign language for their future career.

Thus, foreign language vocational training is most effective if classes in the disciplines «Professionally Oriented Foreign Language» and «Language for Special Purposes» are indeed interdisciplinary in nature, and approaches, technologies and teaching methods used take into account the language and vocational skills accumulated by students' informational experience.

Monitoring the progress of the experiment has found out that this method allows students to acquire and consolidate the necessary foreign-language communicative competencies within their subject area, which allows graduates to enter the international level.

It should also be noted that the tasks we offer are universal in nature and allow students to effectively use the language, speech and pro-

fessional experience available in the arsenal in real professional areas in the direction of the education program «Biology».

References

Abdallah, M.M.S. (2016). Towards improving content and instruction of the «TESOL/TEFL for Special Needs» course: an action research study. In *Educational Action Research*, 25(3), 420–437. DOI: //dx.doi.org/10.1080/09650792.2016.1173567

Babić, Ž. (2016). Exploring ESP syllabi: Some implications for further pedagogical considerations. In *Zbornik Instituta za Pedagoska Istrazivanja*, 48 (1), 164–179. DOI: http://dx.doi.org/10.2298/ZIPI1601164B

Byrdina, O.G., Dolzhenko, S.G., & Yurinova, E.A. (2018). Formirovanie inoyazychnoj kommunikativnoj kompetencii u studentov nefilologicheskih profilej podgotovki posredstvom Content-based Active Speaking Technology [Formation of foreign-language communicative competence of non-philological training profile students by means of Content-based Active Speaking Technology]. In Novosibirsk State Pedagogical University Bulletin, 8(4), 7–25. DOI: https://dx.doi.org/10.15293/2226–3365.1804.01

Cervetti, G.N., Kulikowich, J.M., & Bravo, M.A. (2015). The effects of educative curriculum materials on teachers' use of instructional strategies for English language learners in science and on student learning. In *Contemporary Educational Psychology*, 40, 86–98. DOI: http://dx.doi.org/10.1016/j.cedpsych.2014.10.00

Cuenca, F.R. (2015). Communication as a Teaching/Learning Strategy in Bilingual Education. In *Journal of Siberian Federal University. Humanities & Social Sciences*, 12 (5), 1781–1789

Demir, Y., Mutly, G., Şişman, Y.S. (2018). Exploring the Oral Communication Strategies Used by Turkish EFL Learners: A Mixed Methods Study. In *International Journal of Instruction*, 11(2), 539–554. DOI: http://dx.doi.org/10.12973/iji.2018.11237a

Denissova, G.V., Redkina, E.A., & Zalizniak, A.A. (2019). Developing Secondary Language Identity in the Context of Professional Communication. In *Psychology in Russia: State of the Art*, 12(1), 21–30. DOI: http://dx.doi.org/10.11621/pir.2019.0102

Dmitrichenkova, S.V., Chauzova, V.A., & Malykh, E.A. (2017). Foreign language training of IT-students with the programme «Translator in the directions and specialties of engineering faculty». In *Procedia Computer Science*, 103, 577–580. DOI: https://doi.org/10.1016/j.procs.2017.01.067

Du, X., Zhao, K., Ruan, Y., Wang, L., & Duan, X. (2017). Beginner CFL learners' perceptions of language difficulty in a task-based teaching and learning (TBTL) environment in Denmark. In *System*, 69, 108–120. DOI: https://doi.org/10.1016/j.system.2017.07.001

Fenton-Smith, B., Humphreys, P., Walkinshaw, I., Michael, R., & Lobo, A. (2017). Implementing a university wide credit-bearing English language enhancement programme: Issues emerging from practice. In *Studies in Higher Education*, 42 (3), 463–479. DOI: http://dx.doi.org/10.1080/03075079.2015.1052736

Foong, F.W. (2018). Acquiring science English: A plan and system are needed. In *Yakugaku Zasshi*, 138(4), 537–549. DOI: http://dx.doi.org/10.1248/yakushi.17–00117

Forteza Fernandez, R.F., & Batista Gonzalez, M. del C. (2019). Language and Cultural Awareness of a Non-Native ESP Teacher. In *Integration of Education*, 23 (1), 23–36. DOI://dx.doi.org/10.15507/1991–9468.094.023.201901.023–036

Galskova, N.D., & Gez, N.I. (2005). *Teoriya obucheniya inostrannym yazykam. Lingvodidaktika i metodika [Theory of foreign language teaching: linguodidactics and methodology*]. Moscow, Academy, 336 p.

Gizatullina, A., & Sibgatullina, A. (2018). Forming a Foreign Language Teacher's Professional Competencies in a Multilingual Educational Environment. In *Journal of Social Studies Education Research*, 9 (3), 282–295

Godzhaeva, N.S., & Logunov, T.A. (2015). Developing Language Competency of University Teachers to Implement Content and Language Integrated Learning (CLIL) in a Regional University: Challenges and

Prospects. In *Journal of Siberian Federal University. Humanities & Social Sciences*, 11, 2299–2306. DOI: https://doi.org/10.17516/1997–1370–2015–8–11–2299–2306

Ilyina, I.V., Tarasuk, N.A., Novikova, O.M., & Gribova, N.S. (2018). Communicative Competence Formation of Teachers in the Sphere of Foreign Language Education in the System of the Advanced Training. In *European Journal of Contemporary Education*, 7(4), 699–709. DOI:_https://doi.org/10.13187/ejced.2018.4.699

Jang, S.J., & Chang, Y. (2016). Exploring the technological pedagogical and content knowledge (TPACK) of Taiwanese university physics instructors. In *Australasian Journal of Educational Technology*, 32(1), 107–122

Kovalyova, Yu. Yu., Soboleva, A.V., & Kerimkulov, A.T. (2016). Project based learning in teaching communication skills in English as a foreign language to engineering students. In *International Journal of Emerging Technologies in Learning*, 2016, 11 (4), 153–156. DOI: http://dx.doi.org/10.3991/ijet.v11i04.5416

Kunanbaeva, S.S. (2014). *Competence-based Modeling of Professional Foreign-language Education*. Monograph, Almaty, 215 p. DOI: http://dx.doi.org/10.17513/np.105.

Menke, M.R., & Paesani, K. (2019). Analysing foreign language instructional materials through the lens of the multiliteracies framework. In *Language, Culture and Curriculum*, 32(1), 34–49. DOI: https://doi.org/10.1080/07908318.2018.1461898

Merrit, J., Lee, M., Rillero, P., & Kinach, B.M. (2017). Problem-Based Learning in K-8 Mathematics and Science Education: A Literature Review. In *Interdisciplinary Journal of Problem-Based Learning*, 11(2). DOI: https://doi.org/10.7771/1541–5015.1674

Passov, E.I. (1991). Kommunikativnyj metod obucheniya inoyazychnomu govoreniyu [Communicative method of teaching foreign language speaking]. Moscow, Education, 222 p.

Passov, E.I. (1977). Osnovy metodiki obucheniya inostrannym yazykam [Fundamentals of teaching foreign languages]. Moscow, Russian language, 214 p.

Perez, A., Lorenzo, F., & Pavon, V. (2016). European bilingual models beyond lingua franca: Key findings from CLIL French programs. In *Language Policy*, 15 (4), 485–504. DOI: https://doi.org/10.1007/s10993-015-9386-7

Perna, L.W., Orosz, K., & Jumakulov, Z. (2015). Understanding the human capital benefits of a governmentfunded international scholarship program: An exploration of Kazakhstan's Bolashak program. In *International Journal of Educational Development*, 40, 85–97. DOI: http://dx.doi.org/10.1016/j.ijedudev.2014.12.003

Ponomarenko, L.N., Zlobina, I.S., Galitskih, E.O., & Rublyova, O.S. (2017). Formation of the Foreign Language Discursive Competence of Pedagogical Faculties Students in the Process of Intercultural Dialogue. In *European Journal of Contemporary Education*, 6(1), 89–99. DOI: https://doi.org/10.13187/ejced.2017.1.89

Rezat, S., & Rezat, S. (2017). Subject-Specific Genres and Genre Awareness in Integrated Mathematics and Language Teaching. In *Eurasia Journal of Mathematics, Science and Technology Education*, 13(7b), 4189–4210. DOI: https://doi.org/10.12973/eurasia.2017.00805a

Roussel, S., Joulia, D., Tricot, A., & Sweller, J. (2017). Learning subject content through a foreign language should not ignore human cognitive architecture: A cognitive load theory approach. In *Learning and Instruction*, 52, 69–79. DOI: http://dx.doi.org/10.1016/j.learninstruc.2017.04.007

Shaikhyzada, Zh.G., Kostina, E.A., Zatynenko, A.M., Kubeyeva, A.E., & Zhetpisbayeva, B.A. (2016). The Model of Technology of University Engineering Students' Foreign Language Training in Conditions of Multilingual Education in Kazakhstan. In *Novosibirsk State Pedagogical University Bulletin*, 4(32), 95–106. DOI: http://dx.doi.org/10.15293/2226–3365.1604.09

Short, D.J. (2017). How to Integrate Content and Language Learning Effectively for English Language Learners. In *Eurasia Journal of Mathematics Science and Technology Education*, 13, 4237–4260. DOI: https://doi.org/10.12973/eurasia.2017.00806a

Sobkowiak, P. (2017). Toward an Integrated Model of Teaching Business English in Tertiary Education. In *Challenges of Second and Foreign Language Education in a Globalized World*, 117–130. DOI: http://dx.doi.org/10.1007/978-3-319-66975-5 8

Tazhigulova, G.O., Assanova, D.N., Uteubaeva E.A., Mekezhanova, A.B., & Tleuzhanova, G.K. (2018). Conditions of English language teaching to prospective biology teachers in Kazakhstan. In *Novosibirsk State Pedagogical University Bulletin*, 8(6), 23–40. DOI://dx.doi.org/10.15293/2226–3365.1806.02

Walqui, A. (2006). Scaffolding instruction for English learners. A conceptual framework. In *International Journal of Bilingual Education and Bilingualism*, 9/2, 159–80.

Wen, Q. (2016). The production-oriented approach to teaching university students English in China. In *Language Teaching*, 51 (4), 1–15. DOI: http://dx.doi.org/10.1017/S026144481600001X

Zhetpisbayeva, B.A., Shelestova, T.Y., Akbayeva, G.N., Kubeyeva, A.E., & Tleuzhanova, G.K. (2016). Problems of English language implementation into primary schools for multilingual education development in the Republic of Kazakhstan. In *Novosibirsk State Pedagogical University Bulletin*, 4, 59–72. DOI: https://doi.org/10.15293/2226–3365.1604.06

Zimnyaya, I.A. (2004). Klyuchevye kompetencii – novaya paradigma rezul'tata obrazovaniya [Key competences as the effective-target basis of the competence approach in education]. Author's version. M., Research Center for Quality Problems in Training of Specialists, 40 p.