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# **EFFECTIVE WAYS OF THE COMPETENCE IMPROVEMENT OF STUDENTS OF NON-LINGUISTIC SPECIALTIES AT A FOREIGN LANGUAGE STUDYING** V. Stepanenko<sup>1</sup>, D. Syrymbetova<sup>1</sup>, T. Umurzakova<sup>1</sup>

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#### Abstract

This article says that active learning methods create conditions for the formation and consolidation of professional knowledge and skills of students, create the necessary conditions for the development of skills to think independently, navigate in a new situation, find their own approaches to solving problems, establish business contacts with an audience that determines the professional qualities of a future specialist, equip them with the basic knowledge necessary for a specialist in his qualifications, form professional skills and abilities . Divergent thinking replaces the convergent one, which allows students to form not only the necessary knowledge of the discipline, as it was in the traditional system, but also allows them to form skills and research competencies with reference to practical reality, educates specialists who can think not only linearly, but also versatile, critical and objective. Of particular interest is the application of the principles of development of divergent thinking in the field of professional development.

Key words: skills, active methods, problem training, divergent thinking, professional competence, innovative technologies.

# ЭФФЕКТИВНЫЕ СПОСОБЫ ПОВЫШЕНИЯ КОМПЕТЕНЦИЙ СТУДЕНТОВ НЕЯЗЫКОВЫХ СПЕЦИАЛЬНОСТЕЙ ПРИ ИЗУЧЕНИИ ИНОСТРАННОГО ЯЗЫКА Степаненко В.Г.<sup>1</sup>, Сырымбетова Д.С.<sup>1</sup>, Умурзакова Т.Е.<sup>1</sup>

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#### Аннотация

В данной статье говорится о том, что активные методы обучения создают условия для формирования и закрепления профессиональных знаний, умений и навыков у студентов, создают необходимые условия для развития умений самостоятельно мыслить, ориентироваться в новой ситуации, находить свои подходы к решению проблем, устанавливать деловые контакты с аудиторией, что определяет профессиональные качества будущего специалиста, вооружают основными знаниями, необходимыми специалисту в его квалификации, формируют профессиональные умения и навыки. Дивергентное мышление приходит на смену конвергентному, что позволяет формировать у обучающихся не только необходимые знания по дисциплине, как это было в традиционной системе, но и позволяет сформировать навыки и исследовательские компетенции с привязкой к практической действительности, воспитывает специалистов, которые умеют мыслить не только линейно, но и разносторонне, критически и объективно. Особенно интересным является применение принципов развития дивергентного мышления в области профессионального развития.

Ключевые слова: умения и навыки, активные методы, проблемное обучение, дивергентное мышление, профессиональная компетентность, инновационные технологии.

# ТІЛДІК ЕМЕС МАМАНДЫҚТАР СТУДЕНТТЕРІНІҢ ҚҰЗЫРЕТТІЛІГІН АРТТЫРУДЫҢ ТИІМДІ ТӘСІЛДЕРІ ШЕТ ТІЛІН ОҚЫТУ КЕЗІНДЕ В.Г. Степаненко<sup>1</sup>, Д.С. Сырымбетова<sup>1</sup>, Т.Е. Умурзакова<sup>1</sup> <sup>1</sup> М. Қозыбаев атындағы СҚМУ, Петропавл, Қазақстан

#### Аңдатпа

Бұл мақалада оқытудың белсенді әдістері студенттердің кәсіби білімдерін, іскерліктері мен дағдыларын қалыптастыру және бекіту үшін жағдай жасайды, өз бетінше ойлауға, жаңа жағдайда бағдарлауға, мәселелерді шешуге өз көзқарастарын табуға, аудиториямен іскерлік қарым – қатынас орнатуға қажетті жағдайлар жасайды, бұл болашақ маманның кәсіби сапасын анықтайды, оның біліктілігіне маманға қажетті негізгі біліммен қаруландырады, кәсіби іскерліктер мен дағдыларды қалыптастырады. Дивергенттік ойлау конвергенттік ауысымға келеді, бұл білім алушыларда дәстүрлі жүйеде болғандай пән бойынша қажетті білімді қалыптастыруға мүмкіндік береді, сонымен қатар практикалық шындыққа байланыстыра отырып, дағдылар мен зерттеу құзыреттіліктерін қалыптастыруға мүмкіндік береді, тек қана желілік қана емес, жан – жақты, сыни және объективті ойлай алатын мамандарды тәрбиелейді. Кәсіби даму саласында дивергенттік ойлауды дамыту принциптерін қолдану әсіресе қызықты болып табылады.

**Түйінді сөздер:** біліктер мен дағдылар, белсенді әдістер, проблемалық оқыту, дивергенттік ойлау, кәсіби құзыреттілік, инновациялық технологиялары.

#### Introduction

Relevance of research. Process of formation of qualitatively new valuable and information environment of society, integration of the Kazakhstan education into the international system not just have the determining impact on development of modern higher education, and set absolutely new level of requirements to its quality, both in procedural, and in resulting aspects.

Talking into account the designated contradictions the research problem was formulated: what personal the developing potential and pedagogical conditions of formation of professional competence of students of non - linguistic specialties of higher education institution means of a foreign language in the conditions of multilevel education. The solution of this problem was a research objective.

Research problems:

1. To reveal specifics of professional competence of students of non – linguistic specialties of higher educational institutions on the basis of the analysis of domestic and foreign psychology and pedagogical literature, to specify features and structural and substantial parameters of the basic concept «professional competence».

2. On the basis of the revealed features and structural and substantial parameters to prove pedagogical conditions of formation of the main professional competence of students (key, basic, special) by means of a foreign language – to develop model and to introduce technologies of realization of competence – based approach in the course of training of students in a foreign language in the conditions of multilevel education.

3. To reveal the main criteria and indicators of formation of professional competence of students means of a foreign language.

4. To experimentally check the efficiency of implementation of the offered technologies of competence – based approach in educational process.

## Main part

With the development of scientific and technological progress, the amount of required information for learning is increasing. The information quickly becomes outdated and needs to be updated. It follows that learning, which is focused on memorizing and preserving material in memory is only partially able to meet modern requirements. Hence, the problem is the formation of such skills that would allow the student to assimilate independently the constant flow of new information. We need new methods and approaches in training that could help us learn independently, also find and assimilate the necessary information independently [1].

In this regard, the emphasis in the study of academic disciplines is transferred to the process of cognition itself, the effectiveness of which completely depends on the student's cognitive activity. The essence of active teaching methods aimed at developing skills and

abilities is to ensure that students complete the tasks in the process of solving which they independently master skills and abilities. The manifestation and development of active teaching methods is due to the fact that the training was given the task of not only assimilating students with knowledge and the formation of professional skills but also the development of creative and communicative abilities of the individual, the formation of a personal approach to the emerging problem. Thus, the direct involvement of students in active leaResearch problems:

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Rning and cognitive activity in the course of the educational process is associated with the use of techniques and methods that have received the generalized name «active teaching methods».

The problem of personality activity in education as a leading factor in achieving learning goals, general development of an individual and vocational training requires a fundamental understanding of the most important elements of education and argues that the strategic direction to enhance learning is not to increase the amount of information transmitted, not to strengthen and increase the number of control measures and the creation of didactic and psychological conditions for the meaningfulness of the teaching, the inclusion in it the student at a level not only intellectual, but personal and social activity [5].

Active learning involves the use of such a system of methods which is mainly aimed not at the teacher's presentation of ready – made knowledge, their memorization and reproduction but at the students' independent mastery of knowledge and skills in the process of active mental and practical activities.

The general tasks of training a specialist also determine the choice of training method. The teacher should always remember that learning is not only the mastering of knowledge and skills but also the development and upbringing of students. For the development of creative professional thinking, active learning methods are widely used: heuristic conversations, educational discussions; for the development of cognitive interests and abilities – independent work with additional literature, analysis of problem situations, the solution of situational problems [6].

Methods of active learning are divided into: imitation methods (game and non - game), based on the imitation of professional activity, and non - imitation.

Non – game methods include analysis of problem situations, actions according to instructions, etc. And game methods are divided into business games, didactic or educational games, game situations, role – playing games, imitation games.

Gaming procedures and techniques include means of implementing individual, single principles. First of all, various forms of activating lectures and other traditional forms of education, play pedagogical techniques, separate means of activation, for example, a lecture using the method of analyzing specific situations in the form of an illustration carried out by a teacher, a binary lecture, a problem lecture, a creative task – realizing the principle of problem; lecture, press conference, lecture – discussion, lecture – conversation – implementing the principle of interactive communication [3].

An example of a game situation can be considered a discussion session, conducted in expanded form, with unplanned performances and opposition, when it is not known in advance who and in what capacity will participate in the discussion. As well as the situations used for role – playing games, theatrical games, simplified management trainings, etc.

Understand methods are understood as internships at the workplace, programmed instruction, problem lectures, and graduation work.

Characteristics of the main active teaching methods:

Problem is based learning is a form in which the process of cognizing students approaches the search and research activities. In cooperation with the teacher, students «discover» new knowledge for themselves, comprehend the theoretical features of a separate science.

The main didactic method of «turning on» students' thinking in case of problem – based learning is the creation of a problem situation, having the form of a cognitive task, fixing some contradiction in its conditions and a concluding question that this contradiction objectifies.

Analysis of professional situations is the method develops the ability to analyze unrefined life and production problems. Faced with a specific situation, the student must determine: is there a problem in it, what it is, determine its attitude to the situation.

Role – playing is a game – based method of active learning, characterized by the presence of a problem, the distribution of roles between the participants in its solution and the introduction of a teacher in the process of occupying corrective conditions.

For example, using the role – playing method, nursing manipulation can be simulated;

The game production design method significantly activates the study of academic disciplines, making it more efficient due to the development of the skills of the student's design activity [4].

The seminar – discussion is formed as a process of dialogic communication of participants, during which the formation of practical experience of joint participation in the discussion and resolution of theoretical and practical problems takes place.

The «round table» is a method of active learning, one of the organizational forms of students' cognitive activity which allows them to consolidate the knowledge gained earlier, fill in the missing information, form the ability to solve problems, strengthen their positions, teach the culture of discussion. Along with the active exchange of knowledge, students develop professional skills to express their thoughts, argue their ideas, substantiate proposed solutions and defend their beliefs.

Brainstorming is a widely used way of producing new ideas to solve scientific and practical problems. Its goal is the organization of collective mental activity in the search for innovative ways to solve problems.

In the technology of active learning, «forced activity» of participants is conditioned by the conditions and rules under which the student participates actively, thinks hard or leaves the process altogether.

The main didactic tasks faced by the teachers are to interest students in their experience, to awaken a sense of the new, to cause a reflexive self – assessment of their own practice.

Active learning methods allow us to solve at the same time three educational and organizational tasks: to subordinate the learning process to the teacher's controlling influence, to ensure active participation in training work of both trained students and those not trained, establish continuous monitoring of the learning process.

Thus, active learning methods are learning activities. So, for example, L.S. Vygotsky formulated a law that says that learning entails development as the personality develops in the process of activity. It is in the active work directed by the teacher that students master the necessary knowledge, skills, and skills for their professional activities, develop their creative abilities. The basis of active methods is dialogical communication, both between the teacher and students and between the students themselves. And in the process of dialogue, communication skills develop, the ability to solve problems collectively, and most importantly, students' speech develops.

Active teaching methods are aimed at attracting students to independent cognitive activity, to arouse personal interest in solving any cognitive tasks, the possibility of applying the knowledge gained by students. The goal of active methods is that all mental processes take part in the mastering of knowledge and skills [2].

Thus, active learning methods create conditions for the formation and consolidation of professional knowledge and skills of students, create the necessary conditions for the development of skills to think independently, navigate in a new situation, find their own approaches to solving problems, establish business contacts with the audience, which determines professional qualities of the future specialist, equip with the basic knowledge necessary for the specialist in his qualifications, form professional skills and abilities, since theory is necessary for practice and practice for theory.

And also active methods of training allow developing divergent thinking at students. In modern conditions of modernization of the higher education caused by signing by Kazakhstan of Bologna Process problems of formation of divergent thinking of students are relevant. The market needs, first of all, those experts who can generate a large number new, time of non – standard decisions, the adaptabilities possessing high degree but also having some skills and ability, «intuition» from this set of the non – standard ideas to select the most effective.

It is obviously possible to define these experts as able to think not only linearly, but also it is versatile, critically and objectively. In our opinion, use of the principles of development of divergent thinking in the field of professional development of the teacher of the higher school is especially interesting, as it is in the broadest sense, area of our professional interests.

For full understanding of a question, nevertheless it is necessary to give definition to divergent thinking. So, being the author of concepts «divergent» and «convergent» thinking Gilford as follows defines these two concepts: [1]

*Divergent thinking* is the form of thinking based on the strategy of generation of a set of solutions of the unique task.

*Convergent thinking* is the form of thinking based on the strategy of exact use of previously acquired algorithms of the solution of a certain task. This type of thinking is widespread at training of specialists on a traditional education system.

So, it is offered to use the organization of research on a practical training and SSW as one of ways of activation of divergent thinking [2]. Research in the relevant practical directions allows realizing also the principles of contextual training, formation of competences and abilities of the student, according to requirements of reality that will allow forming competitive experts. Working on practical projects, the student has also an opportunity of the choice of a certain specialization, so and it can accurately define itself what knowledge and skills to it will be necessary for high – quality writing of the project. It can serve as additional motivation for self – education or statement of appropriate questions to the teacher who can act as the consultant and give the directions for quest of the necessary knowledge and information.

On the basis of the above – mentioned it is possible to note that there is a need of realization of the personal focused approach for training since it is undoubted, each student will choose subjects for researches and to carry out them in volume, according to the abilities. It is very important at the organization of such form of education not to impose and distribute some ready subjects among students and on the contrary exactly students have to choose their interesting topics for a research within discipline.

Successful realization of the mentioned approaches assumes application of an effective system of estimation since it is easier to estimate traditional tasks, they are more linear and require from students the solution by a certain method and can come down only to one certain answer in the form of figure or some certain answer. In this case there are many tasks of estimation of versatile parameters raise at the teacher when performing research by the student.

At the research projects' assessment aimed at development of divergent thinking use of the principles of Blum Taxonomy capable to estimate the level of assimilation of new knowledge of students is also possible. Blum's taxonomy allows to create very accurately the system of research projects' estimation of students and to distribute points according to the level of complexity of its performance. It means it is possible to unite the above-mentioned principles of estimation and to create the synthesized approach which allows uniting various concepts of innovative technologies of training.

It is especially important that students could not only answer questions but also to make questions using, so - called «Blum's Chamomile». This method assumes development of certain types of the questions opening each block of the presented pyramid. This method allows the teacher to form questions of various level of complexity and to diagnose quality of the gained knowledge during the practical occupation.

As it is represented to authors, similar tasks allow developing divergent thinking at students because they need to consider a large number of the directions and spheres at studying one question. Also forming a question, students already in parallel will and look for answers to them since only this way it is possible to be sure of fidelity of a question formulation. This principle is not characteristic of a traditional education system since it is more habitual when questions and only their teachers but not students form.

It is also possible to note that the traditional system has some restrictions connected with features of carrying out a lecture, practical training and the SRS organizations. Due to the limitation of time, tough standards of education and big flows of students in groups, unfortunately, in the majority cases teachers manage to capture only two lower blocks (knowledge and understanding) from the presented levels of Blum pyramid and to go above in rare cases. It defines a gap between high school education and real practice.

In fact most of employers emphasizes that modern university graduates on many specialties, unfortunately, have no elementary skills and abilities which they have to use when performing the functions [5]. It is known that 3 years are required on average in order that the graduate could adapt completely professional requirements of a position and receive necessary skills. It is also interfaced by big personal time and labor expenditure of the

graduate without speaking already and about a psychological component when he can feel absolutely «unsuitable».

On the basis of mentioned above it is possible to define that at the present stage development of the tasks capable is necessary not only to give theoretical knowledge to students and also to develop divergent thinking but also capable to capture all blocks of «Blum's taxonomy».

This system allows motivating students to get points to perform various work, to look for additional literature, so and to increase quality of the gained knowledge. It is necessary for the optimum organization of similar occupations at the beginning, to give at choice without repetitions all subjects of discipline (on average usually it is about 10 - 20 subjects), it will allow each student to specialize in a certain question; also it will allow to avoid banal «writing off». As a result the student during all semester will be engaged at every week – on the submitted scheme it is about 10 weeks but there is a wish to warn that it is only the principle, distribution of terms and points and also types of occupations, undoubtedly, each teacher will make according to the vision and also specifics of readable discipline. Also for convenience of the teacher, it is possible to ask to send all files of the performed tasks in an electronic format for mail. And during student's self – work with a teacher to give students consultations on performance of tasks and also to answer arising during training of questions.

It should be noted that also for increase in interests of students it is possible to give the presented tasks not only in theoretical aspect and in a section of practical application of this knowledge. If the subject of your discipline allows establishing relations with the real companies and the organizations and to form tasks according to their requirements it gives good results. For example: writing the business plan, verification of articles of balance, work with statistical data, elementary SWOT analysis and market researches of competitors, etc. It will allow to have clear ideas of real requirements of the market, and to receive practices' effective bases for students. For the companies of the real sector such cooperation can also be useful since they without financial expenses can receive analytics, those questions' researches for which they don't have any time and means.

On the basis of mentioned above it is possible to draw a conclusion that for today for training of competitive experts it is necessary to make a little more efforts on formation at students not only necessary knowledge of discipline as it was in a traditional system but also it is necessary to create skills and research competences with a binding to practical reality.

# **Research methods**

In our research we checked the following hypothesis: whether process of formation of professional competence of students of not language specialties of higher education institution will proceed most successfully if:

- to organize reorientation of purposes of this process from knowledge - accumulative (qualification) on competence - based;

- to define character and content of vocational education of students of higher education institution in the conditions of the multilevel higher education system;

- to prove pedagogical conditions, the system of the purposes and problems of development of skills in formation of the main professional competency at students (key, basic, special) when training in a foreign language;

- to use a complex of the innovative forms and methods aimed at development of communicative, creative and informative abilities of students, assessment and accounting of level of formation of professional competence of students by means of a foreign language to use a subject – subject models of interpersonal communication and joint creativity.

### **Results and discussion**

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The plan of implementation of the program of discipline is calculated for 1 academic year. The program is calculated on training of students of 1 course.

#### Conclusions

Thus, the hypothesis made by us was confirmed partially – the process of formation of professional competence of students of higher education institution of non –linguistic specialties will successfully proceed, but the character and content of vocational education of students of higher education institution in the conditions of the multilevel higher education system was not defined.

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