

## Didactic Conditions of Improvement of Pedagogical Personnel Training at Higher Education Institutions to Dual Education in the System of VET

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### ABSTRACT

The purpose of the article consists in representation to discussion by specialists of the revealed didactic conditions of enhancement of preparation of the pedagogical personnel in higher education institution to dual training in the system of vocational and educational training. Modeling, aspect system, comparative and structural analyses allowing considering this problem in the context of improvement of pedagogical personnel training at higher education institution to dual training in the VET system became the leading methods of the research of this problem. The following didactic conditions are characterized in the article: training of the teacher of new type; modular systematization of training content; the technological organization of the public-professional relations in training process; the complex of educational-methodical ensuring continuous professionally pedagogical training of teachers and students in higher education institution. Didactic conditions are oriented on the enhancement of preparation of the pedagogical personnel in higher education institution to dual training in the system of technical and professional education and continuous personal growth of the student taking into account individual requirements and demand to professional training in the context of professional self-determination and strengthening of motivation to work on mastering future specialty. The model of preparation is directed to adaptation of pedagogical personnel to new conditions of professional activity in the system of technical and professional education in the conditions of dual training.

### KEYWORDS

Didactic conditions, system of pedagogical personnel training, higher education institution, dual training, system of vocational and educational training

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## Introduction

Success of professional training of future specialists is defined not only by the level of the acquired professional abilities and degree of possession of innovative-automated workplace, but also by independence, initiative and readiness to work, realization of own professional and personal potential. In our opinion, didactic conditions created by us providing efficiency of dual training lead to successful formation of labor values by

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future specialists in the dual training system. In the dual training model in vocational training system is reflected organization of practical and professional-theoretical components of educational process in higher education institution and on the areas of the functioning enterprises.

Kazakhstan society expects from young pedagogical personnel not only ability to be integrated without serious consequences into pedagogical collective, abilities to work in small and large educational groups, abilities to study, abilities to communicate with colleagues and parents of the pupils, but also disclosures of a number of other abilities increasing efficiency of education and upbringing of the younger generation. These abilities are shown in humanistic orientation, personal and professional mobility, aspiration to self-education, self-development and self-improvement, creativity, spiritual maturity, ability to reflection, social activity and tolerance, need for reflection of own activity, need for innovative activity and in the other types, representing at the same time and as characteristics of the teacher of new type and as his/her valuable orientations, V.I. Danilova (2003).

Main objectives of this paragraph of the research:

- to study and estimate real opportunities of professional-pedagogical training process of pedagogical personnel at higher education institution to dual training in the VET system;
- to establish the nature of interdependence of the obtained experimental data and pedagogical conditions of optimization of the studied process defined during the theoretical analysis taking into account possible ways of improvement of the formation process, I.A. Guseva (2007).

As L.N. Glebova et al. (2009) supposes, for system effectiveness of pedagogical personnel training it is necessary to transform the education purposes, its contents and technologies, considering tendencies, development of practice of the general education there is need to go forward this practice. Future teachers need to master technologies of development training. They need to build relations of equal partnership not only with the pupils, but also with colleagues, with workers and production foremen and VET, lecturing staff of the university departments. Generating these conditions, the system of pedagogical personnel training will avoid lag from social and economic transformations, but it will also promote rationalization of these vector changes.

The fact that process of formation of future teachers is based on effective models of students' training for innovative activity, on the base of which the organization of the personal -focused training and formation of personal qualities of future pedagogical personnel belongs to advantages of system.

In the modern era of globalization and economic integration the innovative production needs qualified personnel capable to rapid adaptation to modern conditions of production, having a wide range of the professional and personal competences possessing vital labor values.

Effective solutions of this problem is covered in introduction of dual training into the vocational and educational training system, in the usage of opportunities of social partnership educational institutions and manufacturing enterprises training future specialists according to professional requirements and personal qualities. Increase in demand of labor market and employers of the enterprises for highly qualified and competitive specialists leads to search of possible ways of optimization, to improvement of quality of vocational training of future pedagogical personnel in higher education institution to dual training in the VET system.

The researcher G.I. Kruglikov (2005) defines the term "system of training" as didactic category on the base of which unity of contents, methods and organization of training: the training system dictates structure and sequence of the studied material with the purpose of the most effective mastering by pupils necessary knowledge, skills of the certain specialty. This model, certainly, includes also general development and education of trainees.

Social-economic transformations on the global scale caused rising of the difficult and contradictory social-economic situation in the modern markets of education and labor. Success and efficiency of implementation of reforms are generally connected with the solution of the question of establishment partnership of these markets. Today it is necessary productive interactions of social partners which based on the new form of regulation social-labor relation of society. According to social-economic direction of development of the region modernization of technical professional education in the improvement of the integrated system of training is caused by partnership of three subjects: student – educational institution – employer.

According to message of the President of Kazakhstan N.A. Nazarbayev (2012), passing by students of an obligatory work practice at the enterprises, beginning from the second year of training is legislatively issued that will oblige employers to allocate jobs for practical training, will strengthen responsibility of branch public authorities, national companies, enterprises for training.

In Germany, Integrated in the educational system is attuned to the needs and commerce. The State's responsibility for providing young people with comprehensive range of educational opportunities up to age 18 means that general and vocational education are considered equally important. The participation of industry and commerce in vocational education ensures that the current needs of the world of work are continually taken into consideration.

Career preparation within the framework of schools provides general education. Basic knowledge and life skills aimed at a pre-career job orientation are taught while pupils are still at general education schools, particularly in work studies in job experience programs etc.

It is necessary to determine competence of authorized body on definition of the order of the organization and holding obligatory work practice of students, and also organizations and introductions of dual training in educational process.

The concept "modular training" received lawful justification that involves employer's liability and educational institution at training qualified specialists with prevalence of industrial training and practice at the enterprise, T.F. Efremova (2000).

In this regard for the effective solution of the specified tasks in educational institutions, it is necessary to establish specific didactic conditions of successful introduction in educational process of innovative technologies for designing of maintenance of forms and methods of training.

In modern psychology-pedagogical researches various complexes of didactic conditions of pedagogical personnel training at higher education institution to dual training in the system of vocational and educational training are especially studied. Didactic S.P. Romanov (2002) conditions are circumstances of training which are represented by result of selection, designing and application of elements of contents, forms, methods and tutorials promoting effective decision.

The operating technique of teaching special disciplines in the course of professional-pedagogical training of future teachers in higher education institution is the "classical model of training" constructed on the basis of transfer of the certain



amount of knowledge of the experience gained by former generations and forms teachers, not capable to adapt to the conditions of dual training. This method provides the one way transmission of theoretical material from the teacher though dialogue process of knowledge acquisition is necessary, interaction, with the support on the creative potential, erudition of the teacher is necessary to form beneficially the identity of the student.

Among the specific principles of didactics of the higher school many researchers mark out the principle of the professional orientation. According to V.I. Zagvyazinsky (1990), this principle needs serious consideration on condition of broad interpretation as reference point on training of versatile developed and competitive specialists.

Problems of improvement of vocational training of future teachers are revealed in significant amount of the researches considering its theoretical aspects. On the practical plan the problem of formation of professional skills is solved generally in the line of pedagogical cycle subjects: pedagogics, psychology, private techniques, praxis and special disciplines. Therefore relevance of problem of professional and pedagogical orientation of students and research of their opportunities in the organization and carrying out dual training in the VET system is increased.

For efficiency of pedagogical activity future teacher has to study, master technique of professional education and also, use "Bases of dual training" as the instrument of education and development.

In this regard V.V. Filankovsky (1999) notes that specifics of various subjects included in university program dictate need of more detailed and concrete development of the question of professional-pedagogical orientation of special disciplines taking into account their characteristics.

Not incidentally V.I. Zagvyazinsky (1990) among questions which wait for prime development in the context of such fundamental problem of the theory and practice of the higher pedagogical education points to the problem of formation of socially active identity of the teacher says about professional-pedagogical orientation of training in special disciplines.

The problem of selection of maintenance of pedagogical education is difficult; it demands to itself scientific approach. Defining the maintenance of pedagogical education, it is necessary to apply system approach, at the same time the model of maintenance of system of continuous pedagogical education will represent complex based on interaction of the principles of consistency and sequence.

## **Methods and materials**

### ***Methods of the research***

It is quite clear that theoretical-methodological researches on problems of development of system of continuous pedagogical education with deep justification of scientific-methodical bases and principles of projecting of its contents are necessary.

It is probable that at projecting of maintenance of the pedagogical education aimed at personal development it is necessary to be based on strategic guidelines of modernization of comprehensive school. Among them those guidelines are important on which in contents is reflected teacher's renovated work: first, VET is guided by the most important factor of humanization of the socioeconomic relations, formations of new vital formation of the personality; secondly, potential of education needs to apply fully to consolidation of society, preservation of uniform cultural space of the country, education of the tolerant relations; thirdly, VET has to bring into process of dual training of competitive specialists preparation L.I. Khasanova (2006).

That in the course of the higher pedagogical education of future teachers to bring to performance of these tasks, it is necessary to go towards more consistently to the productive aim:

a) to arrange, on the one hand, the occurring still known lopsidedness in education, technocratic tendencies in training of specialists of natural-science and technical profile, and on the other hand – integration of social and humanitarian knowledge into natural-science and technical knowledge is necessary;

b) to train educated specialists not only with good professional base, but also capable to complete and system analysis of complex problems of modern life of society and environment.

For pedagogical education such preparation is followed: first, overcoming contradictions between subject-methodical, psychological- pedagogical and social-culturological training of future teacher; secondly, ensuring balance of theoretical training and system pedagogical practice.

The professional-pedagogical filling of maintenance of all cycles of the studied subject is also considered, and fundamentalization of vocational training of future teacher of vocational education is provided. The problem is not only in deepening of theoretical bases of subject- methodical and psychology- pedagogical knowledge, but also in arming students over subject , methodological knowledge, formation of methodological culture. It gives the chance to the teacher consciously to choose scientific ideas and theories, and also adequate contents and necessary technologies of educational process. Ability on diagnostic basis independently to find optimum model for this school and pupils and in its framework to construct real teaching and educational process is an important condition of formation of innovative readiness of future teacher.

Therefore, need of harmonization of theoretical training and education of future teachers is caused by inquiries of new school and analysis of difficulties of young teachers' work. Inability to use theoretical knowledge in practice, difficulty in projecting, organizing and communicative activity, problems in the organizations of off hour work and cooperation with pupil's family, inability to find creative approach, inclination to reproductive types of pedagogical activity, not formed skills of self-education - here not the full list of what future teachers do not finish in higher education institution fully that they tell entries in trainee sheets of the first year of work at school.

The reasons of these difficulties are hidden in the following: contents of modern pedagogical education have knowledge focused direction; in it there are no personal-valuable, operational-activity, information-communicative and other components of content of education without mastering them it is impossible to develop readiness of the graduate of teacher training to innovative professional activity. Scientifically directed maintenance, restriction of methods of training only with reproductive, traditional forms - lectures, seminars, laboratory works and practical works and professional, production, technological practice. The training of dialogization, guiding on formation of subjectivity of the student, development of his/her creativity and emotional and strong-willed sphere are necessary. Educational discussions and conferences, "brainstorming", role-playing and business games, educational modeling and projecting, combination of the doctrine and research – all these are included in modern educational space.

Let's emphasize need of computerization of educational process of dual training. The usage of the computer as tutorials stimulated impulse of information aspect of independent cognitive activity of the student, improved diagnostic, control and



estimated functions of educational process V.A. Krasilnikova et al. (2002). The modern software gives the possibility to use computer for the solution of the most various tasks on the basis of creation of didactic complexes, reference and information services, complex of tasks for independent works, computational and analytical systems, training and computer programs, etc. By means of the computer it is possible to motivate effectively by the student on cognition, but also on professional motives and interests, to develop system thinking, to represent completely pedagogical activity, all-pedagogical and educational abilities, valuable meanings of professional activity. Therefore, computerization is very important in formation of the future teacher.

Use of information technologies in the course of training (application of slides, animation, video topics, electronic education guidance, textbooks, etc.) is not widely applied; they are used in the demonstration purposes when carrying out open lessons.

As P.V. Seredenko (2008) marks out, weak practical preparation of future teacher also affects quality of modern pedagogical education. One of the major didactic principles, connection of theoretical training with practice, has been forgotten, without them knowledge is formal, they do not have personal sense and emotional coloring, efficiency of mastering all-pedagogical and methodical abilities is decreased, eventually, it causes extinction of professional-pedagogical interests and abilities.

Analyzing problems of formation of professional-significant qualities of future specialists in higher education institution in the conditions of credit system training, K.T. Arynov, T.S. Kosherov & S.N. Laktionova (2004) note that process of improvement does not come down to be limited with organizational transformation levels and elements of education system. The improvement at the level of higher education institution is very important. The main direction here is innovative transformation of training technologies, initial modernization of pedagogical work and all scientific and pedagogical process.

Training of the specialists in this context is based on two complementary and interconnected forms of high school activity: process of preparation and assessment of quality. At the same time training of the specialists is effective at close interrelation and improvement of main activities of any higher education institution and acts as the uniform complete and complex phenomenon, answering the purpose of dual educational function of higher educational institution.

In works of S.A. Uzakbayeva, K.U. Kunakova & A.T. Chaklikova (2016) disclosed entities pedagogical reflections in the context of professional competence. Training of the specialists in this context is based on two complementary and interconnected forms of high school activity: process of preparation and assessment of quality, T.S. Kosherov (2005). At the same time training of the specialists is effective at close interrelation and improvement of the main activities of any higher education institution and acts as the uniform complete and complex phenomenon, answering the purpose of dual educational function of higher educational institution. Cognitive activities of future specialists in formations of competence are considered in works of G. Karataev et al., (2015). Some scientists consider features of vocational and methodical training of future teacher of professional education A. Marasulov et al. (2015). Improving training of the specialists, it is impossible to be limited only to structural changes, it is necessary to raise not only quality of the most pedagogical process, but also to use new headlights of the organization and management of educational process of dual training. The most important of them is drawing up the contract with the enterprises, college and school, revision of standard curricula of dual training, on the basis of the new principles of training conforming to modern requirements and not contradicting state standards of RK for each specialty; management of educational process. Therefore here with special



care and new it is formed on the scientific basis. It is necessary to include elements of scientific search. It is necessary to project practice so that the student - future specialist – strove for quality of its organization A. Marasulov et al. (2016).

In the VET system it is necessary to include judgment of the psychological barriers which are inevitably shown when there is out of limits of habitual ways of execution of professional duty in the mechanism of training of future teachers for dual training.

If it is elicited that future teacher has no objective conditions or data for performance of practical work on the experimental platform on introduction of dual training in the pedagogical process, implementation of correction and self-analyses in pedagogical activity, then permission of this type of the conflict needs thinner management approaches.

V.G. Podzolkov (1999) as the main conditions promoting professional- personal formation of innovative readiness future teachers of higher education institution names the followings: fundamentalization of pedagogical education,

-pedagogization of educational process in higher education institution, refusal of mass approach in favor of individualization of professional-pedagogical training of future teacher, training of the teacher of orders of concrete general education institutions, integration of high school stage with pre-university and post-high school education.

According to L.V. Shkerina (2005), among the most important directions of formation program of training of future teachers special attention needs to be paid on formation of readiness of the teacher to participate in innovative processes to dual training in the VET system. The solution of this task is in changes of accents in vocational training, namely:

— education acquired by future teachers has to focus on continuous self-development only in this case young specialists will be ready to creative interpretation of scientific research and use of data of the best practices;

— informal combination of theoretical heritage and practical experience, perception of pedagogics as continuous development, gives incentives for constant search of new solutions of problems of dual formation of the VET system;

— humanistic position of the teacher which is shown in recognition and acceptance of the child, pupil as values where his "I-concept" - priority part in structure of valuable orientations.

According to N.A. Ovcherenko (2007), development of innovative readiness of future teachers will be able to be covered by management during creation of special conditions, continuity of all stages of multilevel pedagogical education, orientation of university training to generalized model of training of the teacher to innovative activity and psychological diagnostics of the teacher to this kind of activity.

So, for preparation of future pedagogical personnel for dual training in the VET system are necessary conditions under which teachers will acquire knowledge of fundamentals of methodology of scientific knowledge, technologies of innovative activity, will master to conduct practical work on the experimental platform on introduction of innovation to pedagogical process, will correct and independently analyze pedagogical activity.

Comprehensively considering process of training of future teacher including to innovations in professional activity, I.A. Klyushnikova (2005) specifies its following conditions: professional-focused studying of disciplines of subject training of future teacher, discipline of subject preparation both on time factor, and on quality factor have considerable reserves, organization of the special courses in more detail disclosing



specifics. For example, dual training of activity of the teacher, focused on formation of the professional- significant personal qualities, knowledge, skills centered on the base of professional readiness of future teachers higher education institution to dual training in the VET system.

In particular, the courses developed by us for bachelors of "The basis of dual training" and for doctoral candidates "The theory and technique of dual training", in our opinion, will help future teachers of vocational education to create qualities for minimization of difficulties of specific features of the forthcoming professional-pedagogical activity;

Professionalizing of education content by integration in educational process system of the personal-focused creative tasks containing examples of the situations which are met in professional activity of the teacher;

Usage of various organizational forms of study:

— collective training (lectures, seminars, practical training) giving equal starting opportunities in the process of formation of readiness of future teachers for innovative activity;

— individual training assuming independent performance by students of tasks of various complexity depending on the initial level of readiness, and also development of personal qualities; individualized, focused on personification of educational activity, calculated on possibilities of each student, degree of his readiness for pedagogical activity; organization of the self-training of students stimulating need for continuous personal self-improvement and growth;

Choice and realization of the more optimum methods of training; subject-subject interaction formed on the dialogical interaction on the scheme "teacher-student", "student- student", "teacher-foreman in the production-student", developing by students of the reflexing type skills of communication in his cognitive, procedural and personal value that eventually allows students to assert themselves in various forms of cooperation;

Correlation of content of vocational education with the main features of professional activity of the teacher of college or school teacher;

Optimum combination of the general, group and individual forms of the organization of educational process in higher education institution, creation of conditions for the effective organization of independent work of students;

Rational usage of modern technologies, forms, methods and tutorials at various stages of professional and pedagogical training;

Correlation of results of pedagogical personnel training at higher education institution with the requirements connected with the social order on quality of training of specialists – future teachers of dual training;

Formation by students of knowledge, abilities, personal qualities necessary for overcoming the difficulties of pedagogical activity forming innovative training of future pedagogical personnel for dual training in the VET system.

Thus, only at complex practical realization of the specified factors the problem of formation of training of future pedagogical personnel for dual training in the VET system finds its solution.

L.S. Gavrilenko (2008) provides theoretical provisions of formation of training of students of pedagogical higher education institution to pedagogical activity at realization of the following conditions, to carry out monitoring of realization of process of formation of students' training of pedagogical higher education institution for



innovations in pedagogical activity on the basis of specially developed techniques for increase in efficiency and timely correction of this process.

In his research devoted to formation of training of future teachers for experimental activity in higher education institution, R.I. Gorokhova (2000) offers projecting of the educational environment in pedagogical higher education institution on the basis of the following conditions: usage of the block-modular system establishing connection between various blocks of the general education courses focused on training to pedagogical experiment; increase in the general professional standard of future teachers to innovations, creative activity; formation of skills of creative usage of means of information and communication technologies in research and teaching-educational work; development positive motivation to carrying out pedagogical experiments in educational and research work in higher education institution and in future professional activity.

The generalized analysis of psychology-pedagogical conditions of efficiency of training of future teachers for innovative activity is represented in the work of O.R. Badaguyeva (2006). The author offers solution of the problem under condition:

1. Development and realization in teaching-educational process of teacher training college of the missing aspect of students' training to innovative activity including theoretical and practical readiness to innovations;
2. Creation and introduction in practice model of formation of readiness of students to innovative activity;
3. Training of the student within the technology step by step reproducing professional -creative activity of future teacher;
4. Development of diagnostics of level of readiness of future teacher for the innovative activity which is constantly used at college as means and result.

As show results of the conducted theoretical research, the following directions of pedagogical work on improvement of process of training of future teachers for innovative activity accurately are defined by authors: connection of theoretical and practical preparation, establishment of subject-subject relations; application of advanced technologies in training education of students, development of accurate conceptual guidelines and modeling of the studied process, development of optimum monitoring of innovative readiness of future teacher. However these provisions don't find consecutive methodological justification in the formation with theoretical and experimental development of mechanisms of their introduction into practice.

Thus, generalizing the above said, process of vocational training of the teacher as subject of innovative activity is a specific part of professional formation of future teachers. It is under the influence of the general both objective, and subjective conditions. The objective conditions independent of object consciousness of pedagogical system and defining professional formation of students of pedagogical higher education institution in general and as subjects of innovative activity in particular, are connected with real system of vocational training of students in pedagogical higher education institution. They can be:

- professional-pedagogical orientation of preparation;
- content of teaching-educational process;
- unity and interrelation of educational and practical aspects of training.

The subjective conditions influencing on professional formation of future teachers are personal prerequisites of mastering professional and pedagogical activity.



To subjective conditions belong: mental abilities; pedagogical capabilities and abilities; professional-pedagogical orientation of the personality; own activity in mastering the future profession.

The mentioned objective and subjective conditions are necessary, but insufficient for vocational training of the teacher as subject of innovative activity of future teachers to dual training in the VET system. So, M.V. Glebova (2010) offers the following system of didactic conditions: specially selected content of process of training of school students to cognitive operations; ensuring unity of motivational, substantial and operational components of training; unity of reproductive and productive nature of cognitive activity of pupils; gradual increase in degree of their independence in mastering cognitive operations; the incentive-intensifying activity of the teacher.

In addition to these didactic conditions it is possible to add to the incentive-intensifying activity of the teacher of the focusing motivation to work activity of the mentor in the production (2016). It is necessary to allocate the specific conditions providing efficiency of this process.

The experimental base of the research: The South Kazakhstan State University named after M. Auezov South Kazakhstan Regional Pedagogical Institute, College №5 city Shymkent.

### *Stages of research*

Problems research was conducted in three phases:

— the first stage implemented theoretical analysis of the existing methodological approaches to philosophical, psychological and pedagogical scientific literature, dissertations on the issue of implementation of the dual training and methodical provision for the training of future teachers to the dual training, as well as the theory and methodology of educational research; highlighted the problem, the purpose and methods of research, made up of experimental research plan

— the second stage of developing model of perfection of methodical training of the future teachers to the dual training; was detected and substantiated a set of pedagogical and didactic conditions of effective formation of professional skills of the future teachers; It was conducted experimental work, analyzed, tested and refined the findings obtained in the course of experimental work.

— in the third stage of the experimental work, theoretical and practical conclusions were completed, compiled and systematized the results.

## **Results**

### *Structure and content of the research*

We consider that specific conditions in the context of our research substantially are defined by innovative tendencies in education and activity of the teacher in educational practice.

In our opinion, professional-pedagogical training of future teachers for dual training in the VET system will be successful if the following didactic conditions are observed: training of the teacher of new type; modular systematization of content of training, technological organization of the public-professional relations in the process of training (in educational group, in the production practice and etc), a set of educational- methodological support of continuous professionally pedagogical training of teachers, students in higher education institution

The dual system of engineering-pedagogical education connected with integration of two spheres – production and educational, creates optimum conditions for mutual transformation of engineering and pedagogical activity.

Orientation of future experts to mastering methods and laws of scientific knowledge of the direction of competence of mastering skills and ways to use the latest equipment of modern, innovative production and joint educational creative production activity based on social partnership: teacher – mentor's master in the production – student. Realization in active and interactive forms of education: dialogue, polyglot, discussion.

Dialogue with foreman in the workplace, discussion about personal-professional example of the master mentor. Dialogue in the working atmosphere, conversation with excellent workers, various competitions, quizzes, evenings with participations of workers, representatives from the enterprises and students devoted to the celebration of the Labor Day, labor feats and achievements of data of the enterprises, collaboration with workers in drawing up the book of Fame of Labor of the enterprise, etc.

Application by the teacher and mentor- master in the production of the creative professional receptions considering specific personal features and sphere of professional activity of future specialists; motivational-intensifying activity of the teacher and mentor-masters in the production.

Joint educational-creative-production activity of the college teacher, the mentor's master in the production and students is carried out directly in labor collective. The employer on the first place demands from specialists professionalism, creativity and personal qualities of the specialists ready to work, responsibility and duty, mutual respect and culture of the relations.

### ***Stages of model introduction***

Justification and introduction of didactic conditions of process of pedagogical personnel training to dual training in the VET system, and also the Conceptual model of formation of training of future teachers to dual training in the VET system assumed carrying out the following stages of experimental work: determination of initial level of methodical training of future teachers to dual training with usage of methods of testing, questioning, pedagogical observation and introspection of teachers, statistical processing of results of the research; development and introduction of the scientific methodological support promoting successful functioning of conceptual model of improvement of methodical training of future teachers to dual training; determination of level and identification of formation dynamics and improvement of methodical training of future teachers to dual training.

The ascertaining stage is definition of conceptual and theoretical bases of creation of process of high school training of future teachers to dual training in the system of vocational and educational training;

### ***Formative stage***

Within this problem scientific research on training of future specialists on bases of college No. 5, Innovative-technological college of Shymkent and Kentau polytechnical college of Kentau of the Southern Kazakhstan region was conducted.

For realization of the organization and introduction of dual training was created the working group from representatives of educational institution and qualified specialists from the enterprises which developed the following program-methodical documentation of educational process of college:



- working curricula on the specialty: 1209000-Weaving production (by types). Qualification: 1209012 - "Weaver", 1211000 - "Sewing production and modeling of clothes". Qualifications 1211062 - "Tailor", 1211072- "Tailoring designer", schedules of passing educational, concentrated production, predegree practice and training; educational-methodical maintenance of educational process: workbooks; workshops on performance of laboratory and practical works; working programs; methodical aids and recommendations on the independent work; diaries of practical training, working plan of educational work in college, etc. Let's note that for the purpose of mastering of the additional professional competences necessary for successful professional readiness for work of students, and also according to requirements of employers is introduced facultative course: "Bases of professional labor values"

Results of activity of the VET organization and self-assessment on this direction are reflected in table-1. The results of monitoring of students' progress over the past two years have shown dynamic growth. This is evidenced by the results of the interim and final certification. In 2013-2014, the average score was 77.0 points, and in 2014-2015 - 84.0 points. Works of students passed the competitive selection of national and regional level International Festival "Etnofashion" (c. Astana, 2015.), republican competition stage costume "Fashion and scene" (Shymkent, 2015.), In which students took winning places. Regional Olympics on Volleyball- 2015, third place. Joint work of the students' self government, parents' committee, center psychological help "Zhan dunie" social services aimed at improving the education of students.

## Discussion and Conclusions

Didactic conditions are focused on continuous personal growth of the student taking into account individual requirements and requirements to vocational training, professional self-determination and strengthening of motivation to work on mastering future specialty.

Thus, the conduct of industrial tours and meetings with students strengthens motivation for development of the specialty; the formation of professional knowledge and skills, attached to the culture of production provides clear statement of goals and sense of purpose of formation of labor values of future specialists.

The educational feature of the educational process is due to formation of valuable relations to the system of human values. At college the parent committee, the board of trustees together with the Chamber of Entrepreneurs of SKO is created and operates. It was prepared 2-sided agreement on the cooperation of parents and college in the education of students. Joint activities with the participation of parents and the social partners are conducted. The Board of Trustees and the parents' committee support the educational process. So, student volunteers take part in the public life of the city, support orphans, and regularly conduct charitable assistance to veterans of labor, retirees and college invalids. The formation of such personal qualities as responsiveness, independence, initiatives, activity is provided by the implementation of educational activities aimed at achieving professional and personal success in life.

Didactic conditions are provided with activities aimed to the development of professional skills, the formation of skills and experience activities. So, in the educational process between students can be carried out a synchronous game («Synchrogame»), purpose of which is to study the technological model of the production system PLL "Gauhar". Participants are offered to be divided into teams, to assume the role of the customer, supplier, technologist, transport company employee, a specialist in product quality control and accounting and together solve problems on the organization of the implementation of the order received order within a specified time.

This activity helps the students to project, create real production line and puts the task of improving the efficiency of release of the garment. They carry that possible with careful planning of all stages of production, information support of industrial flows, economical production, minimizing the cost of material and labor resources and high-quality production control.

Thus, students, participating in the championships of professional skill, solve the practical problems close to conditions of production: modeling and construction of clothes, programming and reprogramming. They master innovative technologies of modeling and construction of products on the computer, description of the program, troubleshooting, etc. They increase level of development of professional knowledge, skills and professional-valuable orientations, and also gain the practical experience of activity necessary for successful professional adaptation of future specialists and employment on production.

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1. The name of the priority: Intellectual potential of the country
2. The name of a subject of this Project.

"Scientific and methodological bases development of process preparation of future system of technical and professional education to dual training for future teachers".

### Disclosure statement

No potential conflict of interest was reported by the authors.

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### References

- Arynov, K.T., Kosherov, T.S. & Laktionova, S.N. (2004). Problems of sustainable development of continuous education: finding solutions. *Icol.thesesInter.scien. conf. "Modern achievements, functions and base of func.education"*, 3(7), 32-36.
- Badaguyeva, O.R. (2006). *Formation of training of future teacher for innovative activity in the conditions of teacher training college*: PhD Thesis. Ulan-Ude: Irkutsk institute of professional development of educators.



- Danilova, V.I. (2003). *Didactic structuring process of students' training in pedagogical higher education institution*: PhD Thesis. Perm, PermPedagogical Institute.
- Efremova, T.F. (2000). *New Russian explanatory -word-formation dictionary*. Moscow: Education.
- Filankovsky, V.V. (1999). *Formation of professional training of the teacher of physical culture*. Stavropol: Publishing house SSU.
- Gavrilenko, L.S. (2008). *Formation of training of students of pedagogical higher education institution for innovations in pedagogical activity*: PhD Thesis. Krasnoyarsk: the Krasnoyarsk state pedagogical university named after V.P.Astafyev.
- Glebova, L.N., Glebova, L.N., Shelin, T.T. & Shennikov, S.V. (2009). *Introduction to the specialty: Education guidance*. Arzamas: Arzamas.
- Glebova, M.V. (2010). Researches of productive thinking of gifted school students in the course of training. *Creation of the integrated educational space for development of children's talent: kindergarten – school – university: Materials of the All-Russian scientific and practical conference, on March 25-26, 2010: in 3 parts. Part 2. Pedagogics of talent: Judgment of theoretical aspects*. Tomsk: Russia University of Tomsk, 58-98.
- Gorokhova, R.I. (2000). *Block-modular system of training of future teachers for carrying out pedagogical experiment*: PhD Thesis. Cheboksary: the Chuvash state pedagogical university named after I.Ya.Yakovlev.
- Guseva, I.A. (2007). *Social- pedagogical ensuring development the personality of the student in higher education institution*: PhD Thesis. Kostroma: KostromaPedagogical Institute.
- Karataev, G. Ubrayeva, Sh., Krykbaeva, S. & Tleylinova, M. (2015). *Informative activity in future specialists competence formation*. France: Concordia University.
- Khasanova, L.I. (2006). *Formation of the identity of the student as subject of dialogue of cultures in educational activity*: PhD Thesis. Izhevsk: the Udmurt state university.
- Klyushnikova, I.A. (2005). *Formation of professional resistance of students to pedagogical activity*: PhD Thesis. Stavropol: University of Stavropol.
- Kosherov, T.S. (2005). *Some approaches to development of the standards of professional education and training based on competences*. Almaty, Al-Farabi KasNU.
- Krasilnikova, V.A., Vedeneyev, P.V., Zavarikhin, A.S. & Kazarina, T.N. (2002). Electronic components of information and education environment. *Open and distance education*, 4(8), 54-56
- Kruglikov, G.I. (2005). *Methods of vocational education with practical work: teaching aid for students of higher educ. Institutions*. Moscow: Publishing center "Academy".
- Marasulov, A., Saipov, A., Arymbayeva, K., Zhiyentayeva, B., Demeuov, A., Konakbayeva, U. & Bekbolatova, A. (2016). Development Mechanism of an Integrated Model for Training of Specialist and Conceptual-Theoretical Activity of Teacher. *The International Journal of Environmental and Science Education*, 11(10), 3651-3660.
- Marasulov, A., Saipov, A., Poshayev, D., Kamalov, Y., Uzakhova, A., Karsybayev, B., Orazova, A., Baibatshaeva, A. (2015). Modern Principles of Educational Process at the Secondary Vocational and Professional Training. *Mediterranean Journal of Social Sciences*, 6(1), 72-77p.
- Nazarbayev, N.A. (2012). *Strategy "Kazakhstan-2050"*. Direct access: <https://strategy2050.kz/en/>
- Ovcherenko, N.A. (2007). Problem of future pedagogical personnel training for innovative activity. *Materials of the international scientific and practical conference "Training of scientific personnel of the top skills in the conditions of innovative development of economy. Regional, interregional and international aspects"*. Minsk, Belorussia: University of Minsk, 8-12.
- Podzolkov, V.G. (1999). *Professional development of future teacher in the conditions of regional system of continuous pedagogical education*. Tula: Publishing house.
- Romanov, S.P. (2002). *Development of professional competence of chiefs of water management services*. N.Novgorod: Publishing house of Volzh. state. Eng.ped. academy.
- Seredenko, P.V. (2008). *Formation of readiness of future teachers for training of pupils to research skills*: PhD Thesis. Moscow: Moscow pedagogical state university.
- Shkerina, L.V. (2005). *Updating of the quality system of training of future teacher in pedagogical higher education institution*. Krasnoyarsk: RIO Public Educational Institution of Higher Professional Training KSPU named after V.P. Astafyev.
- Uzakbayeva, S.A., Kunakova, K.U. & Chaklikova, A.T. (2016). The essence of pedagogical reflection in the context of professional competence. *International Journal of Applied engineering Research*, 11(5), 112-124.





Zagvyazinsky, V.I. (1990). Innovative processes in education and pedagogical science. *Innovative processes in education: Collection of scientific works*, 4(2), 42-48.